

CPC464
CPC6128
GT65
CTM644
MP3
CT1
AMENDMENT
SERVICE MANUAL

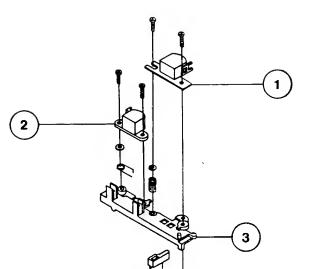
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# CPC464 SECTION

# CPC464 ELECTRICAL PARTS LIST

Ref. No.	Description	Part No
IC's		
IC101	IC DN74LS145	l 170101
IC102	IC AY-3-8912	40001
IC103	IC Amstrad 40009	170102
IC104, 105, 109,		170102
113	10 2111 128 100	1 170100
IC106	IC DN74LS273	170104
IC107	IC TMP-8255AP	170105
IC108	IC HD6845SP	170106
IC110	IC DN74LS132	170107
IC111	IC Z8400APS	40080
IC112	IC DN74LS32	40013
IC114	IC DN74LS373	170108
IC115	IC DN74LS244	170109
IC116	IC AMS40010	40010
IC117-124	IC KM4164B-15	170110
IC125	IC TC74HCU04AP	40008/A
IC301	IC LA4140	170111
IC302	IC LA6324	170112
Transistors		
Q101	TR KTC2120Y	170113
Q102, 301	TR KTC1815-T	170447
Diodes		-
D101	D 1S2472T-77	170115
D301	D 1N4002	400111
D302	LED	170116
Ref. No.	Description	Part No.
Coils		
L301	Coil 82µH	170117
Crystals		
X101	Crystal HC-49/U	170125
Switches		
SW301	Switch, Slide	170122-A
SW302	Switch, Slide	170002
SW303	Switch, Key Board	170007-C
Variable Resistor	r	
VR301	VR Rotary 20k $\Omega$	170003
Miscellaneous		
R326	Resistor Fuse 4.7Ω/¼W	170130
NR101	Resistor Network 2.2kΩ x 6	170130
SP301	Speaker	170131
RY301	Relay	170124
Sockets		
J101	Jack DIN	170025
J102	Socket, D Sub 9 Pin	170023-2
J103	Jack 3.5	170023-2
J104	Jack DC	170022
	July DO	1 1/0024

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PCB303 —	4		
	3)		
		CPC464 CABINET PARTS L	IST
5	PCB302 Ref.	Description	Part No.
	4 2	Lid, Cassette Assembly Cabinet, Top Assembly	170006 170031/A
	4 6	Knob, Volume Cabinet, Bottom	170031/A 170004 170030/A
	7 8	Button, Record Button, Play	170015 170016
	9	Button, Rewind Button, Forward	170017 170018
	11 12	Button, Stop/Eject Button, Pause	170019 170020
5 5 5 8 A	,   12	Counter Belt Counter	170014 170013
	41	*For parts not listed in this	
8 8 8 8 8		please refer to original manual.	
•••			
	./	(13)	
	7		
	8		
	9)10	11	
	11) 12	<b>3</b>	
PCBIOI			
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		PCB301	
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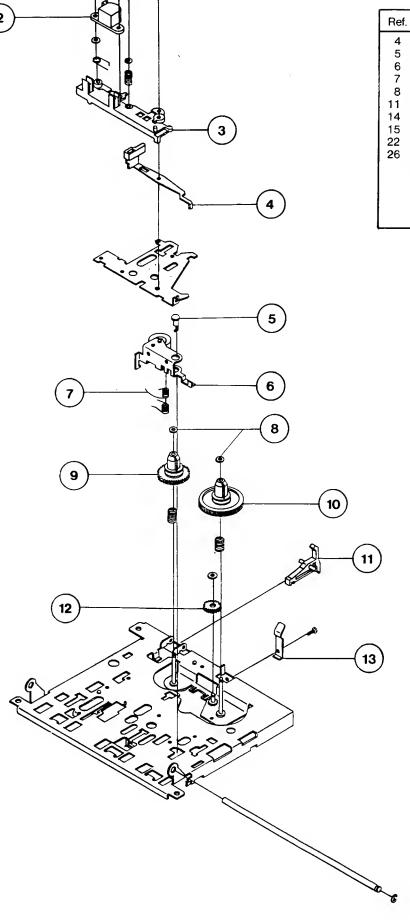


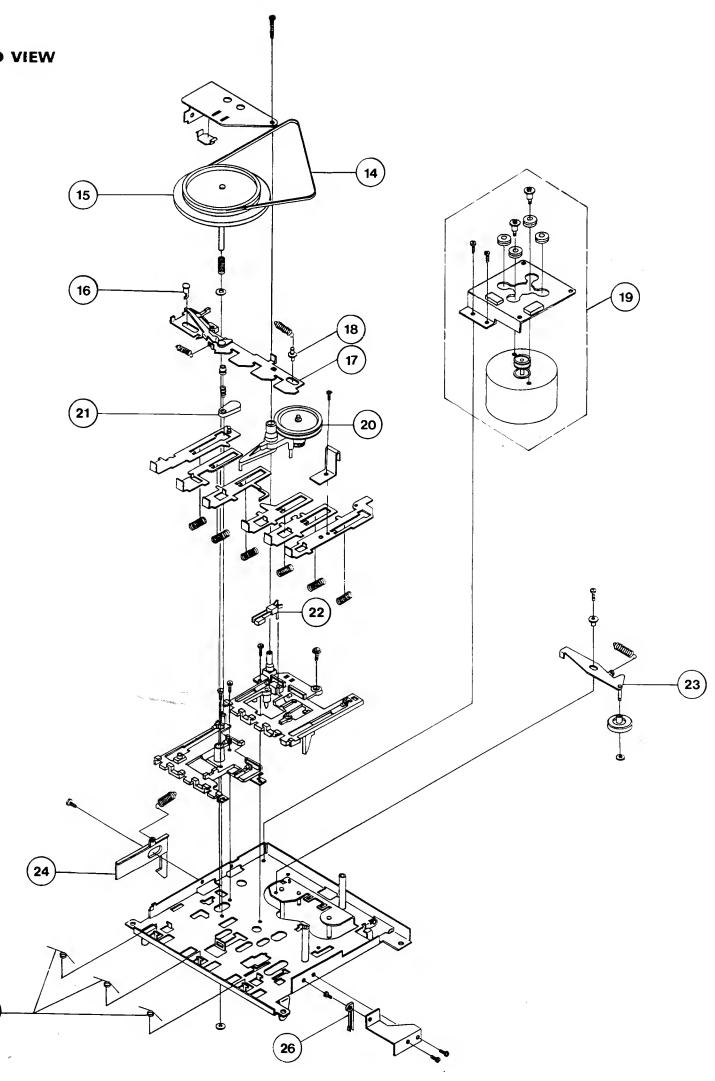
# DECK EXPLODED VIEW

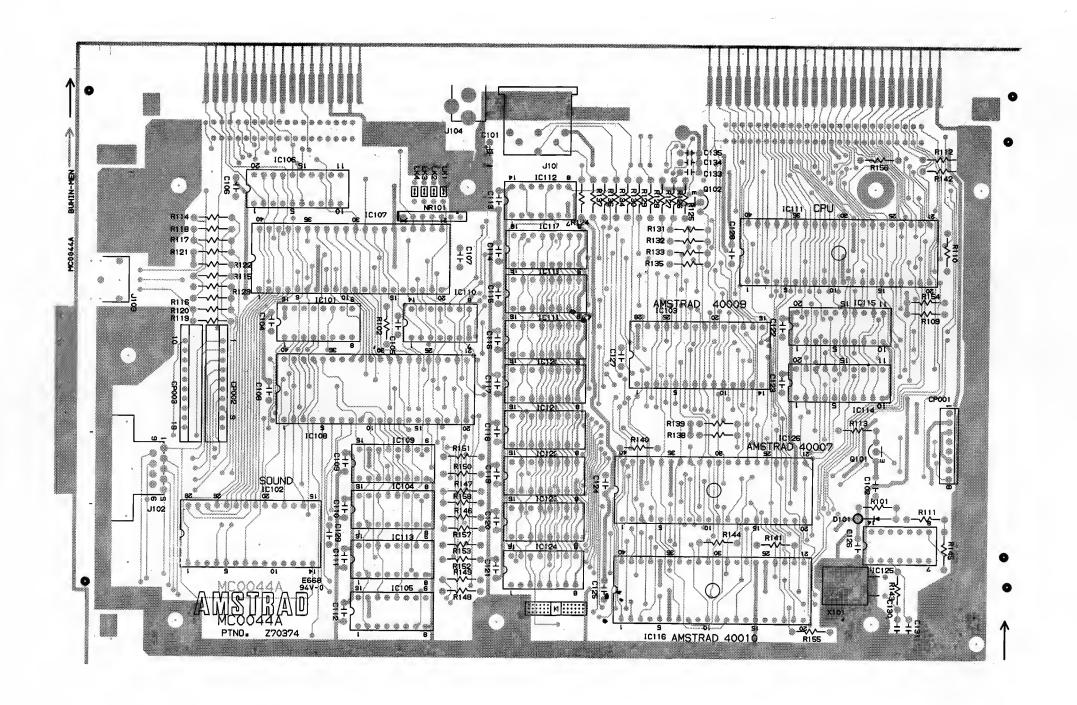
# CPC464 CASSETTE MECHANISM PARTS LIST

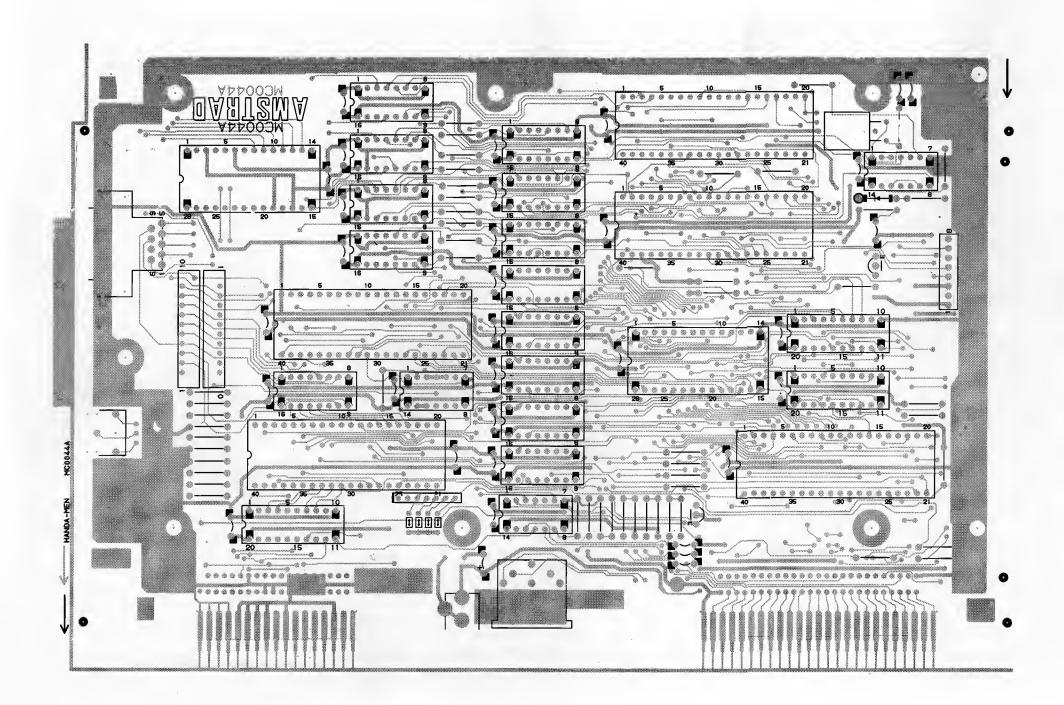
Ref.	Description	Part No.
Her. 4 5 6 7 8 11 14 15	Sensing Plate Pinch Roller Arm Stopper Pinch Roller Pinch Roller Pinch Roller Spring Polyslider Washer Record Safety Lever Main Belt Flywheel	809162 809161 809175 809158 170204 809156
22 26	Switch, Leaf LSA-1120RC Switch, Leaf LSA-115D Actuator Spring Head Record Play-Back Head, Erase Motor Assembly Cassette Mechanism Complete	809157 170212 170201 170202 170211/A

<sup>\*</sup> For parts not listed in this please refer to original manual.

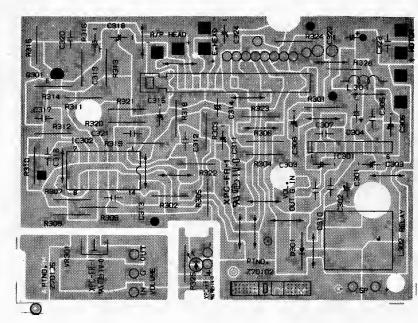




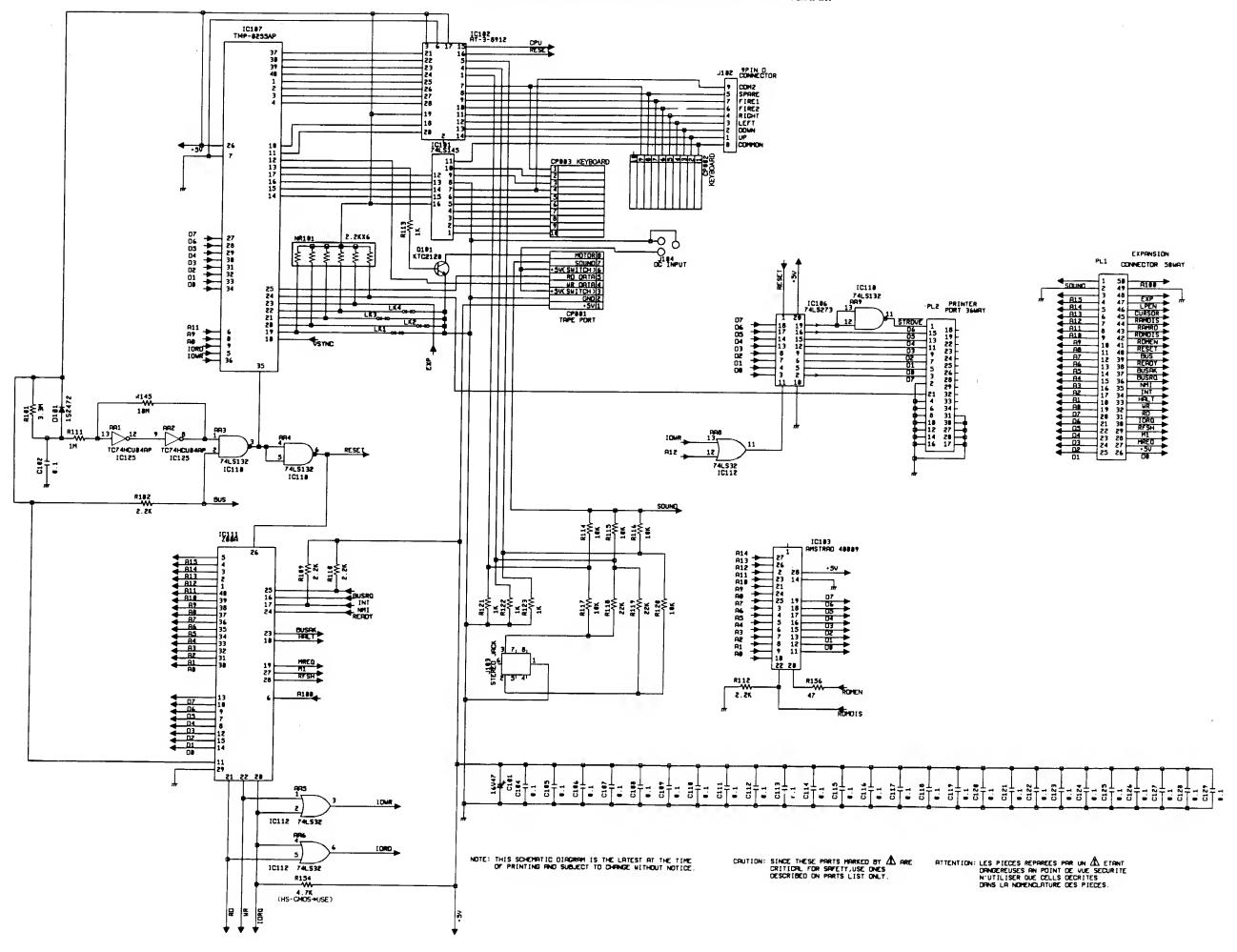




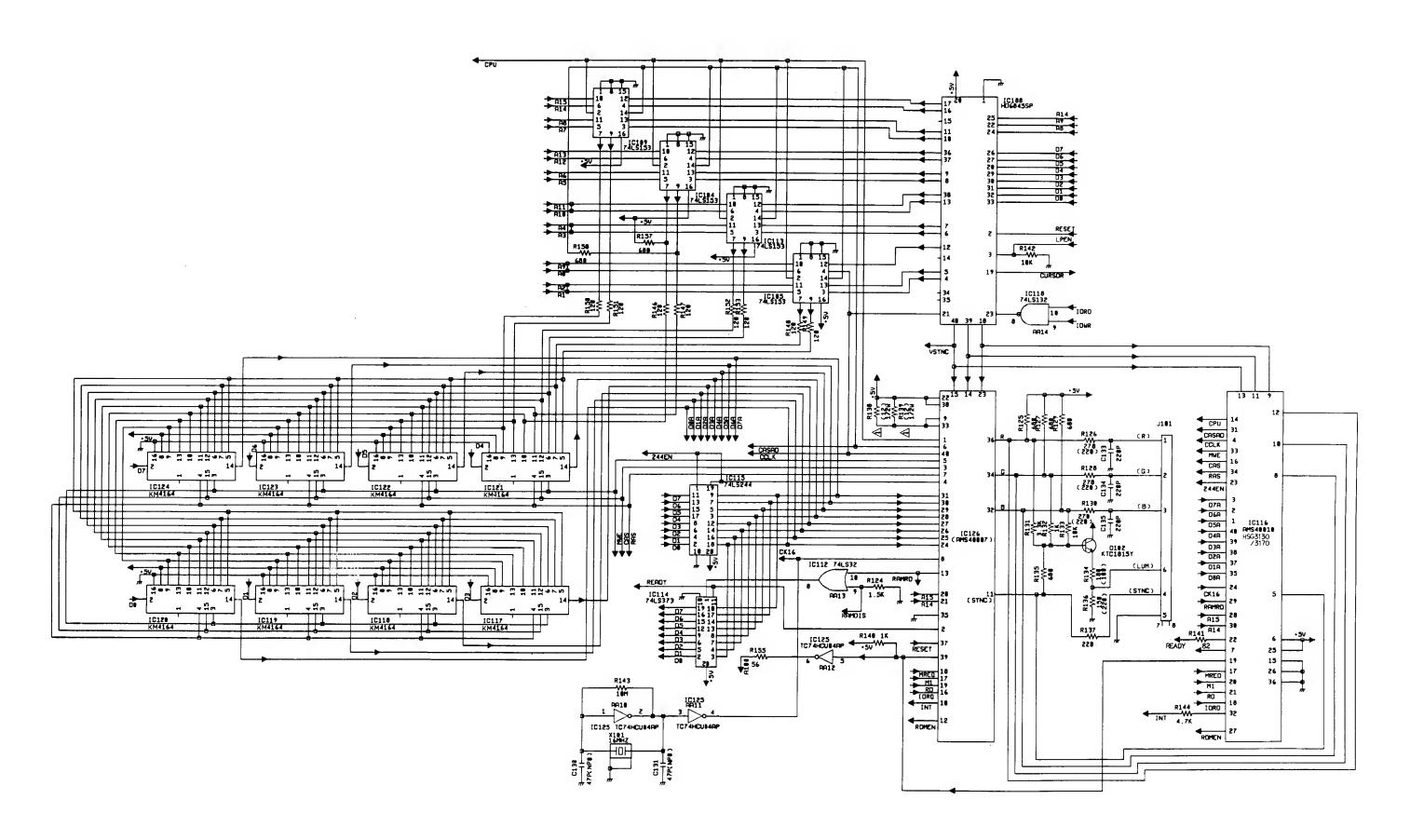
CPC464 TAPE P.C.B.



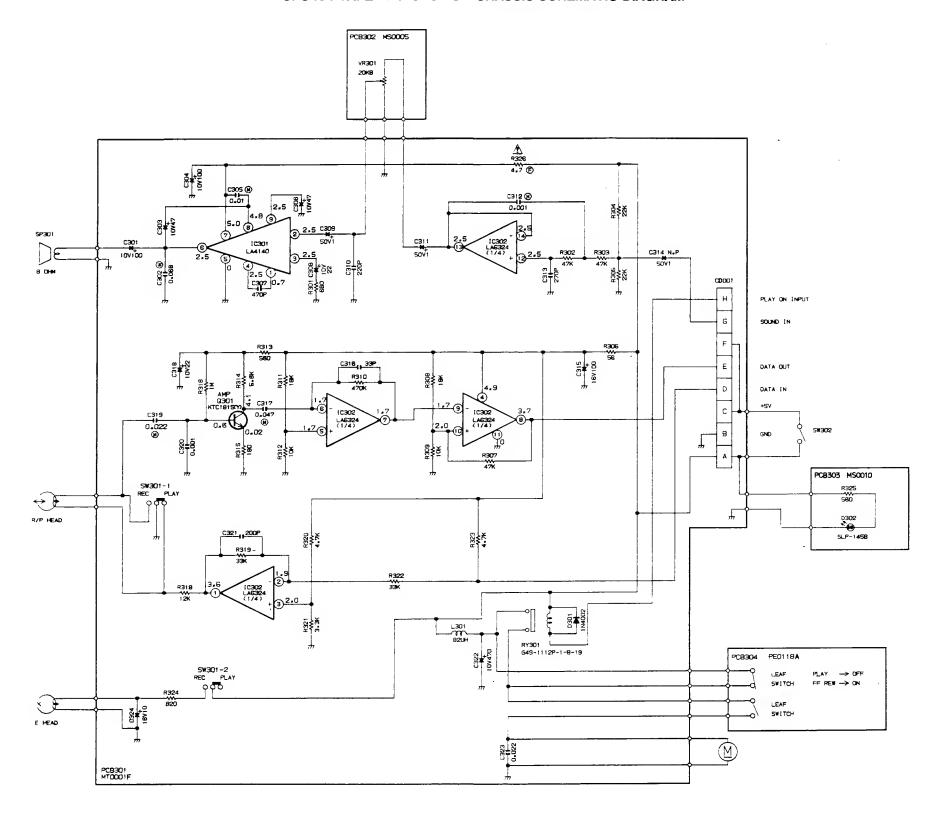
#### CPC464 CPU/PIO SECTION CHASSIS SCHEMATIC DIAGRAM



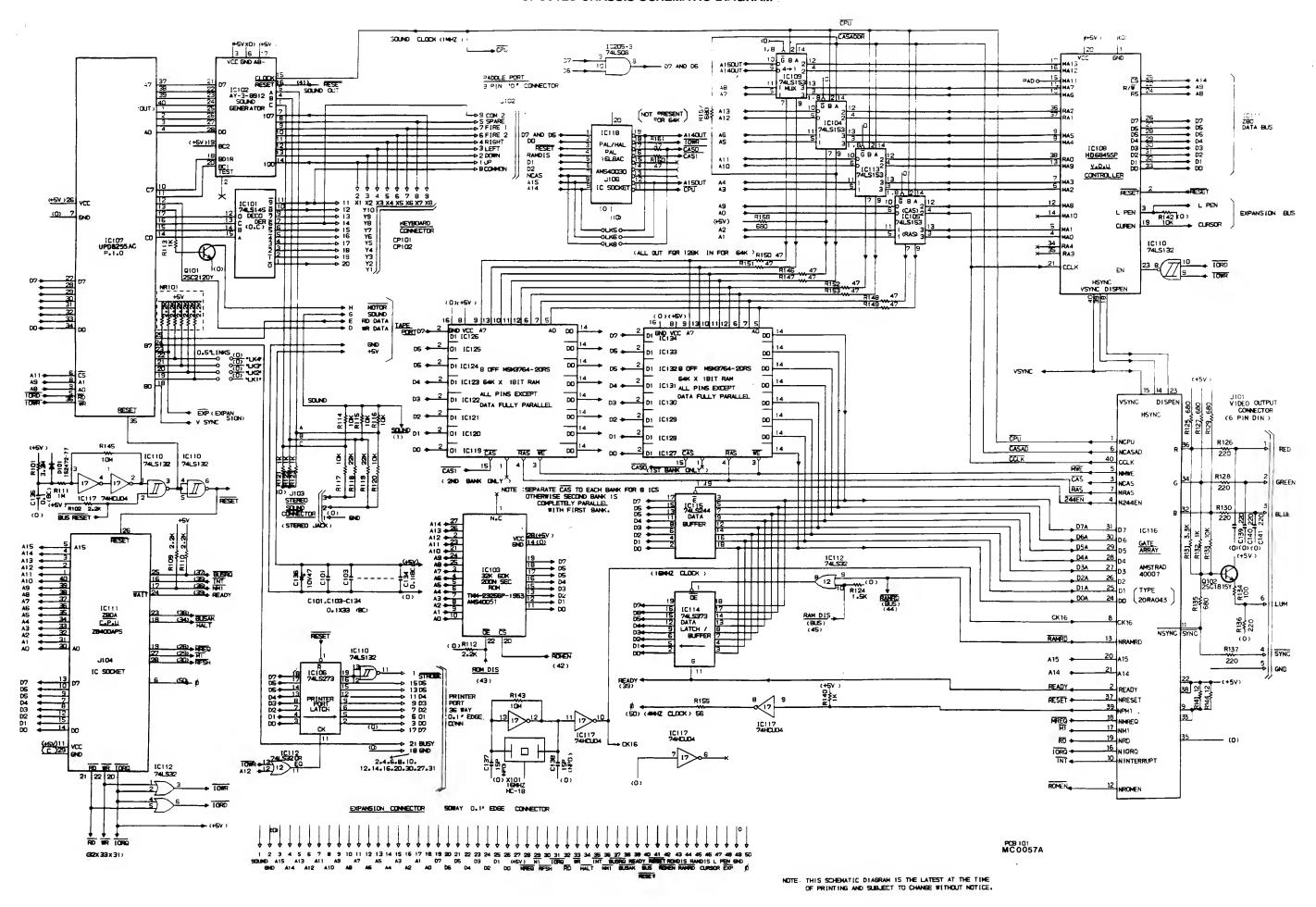
#### CPC464 RAM/CRTC/ULA SECTION CHASSIS SCHEMATIC DIAGRAM

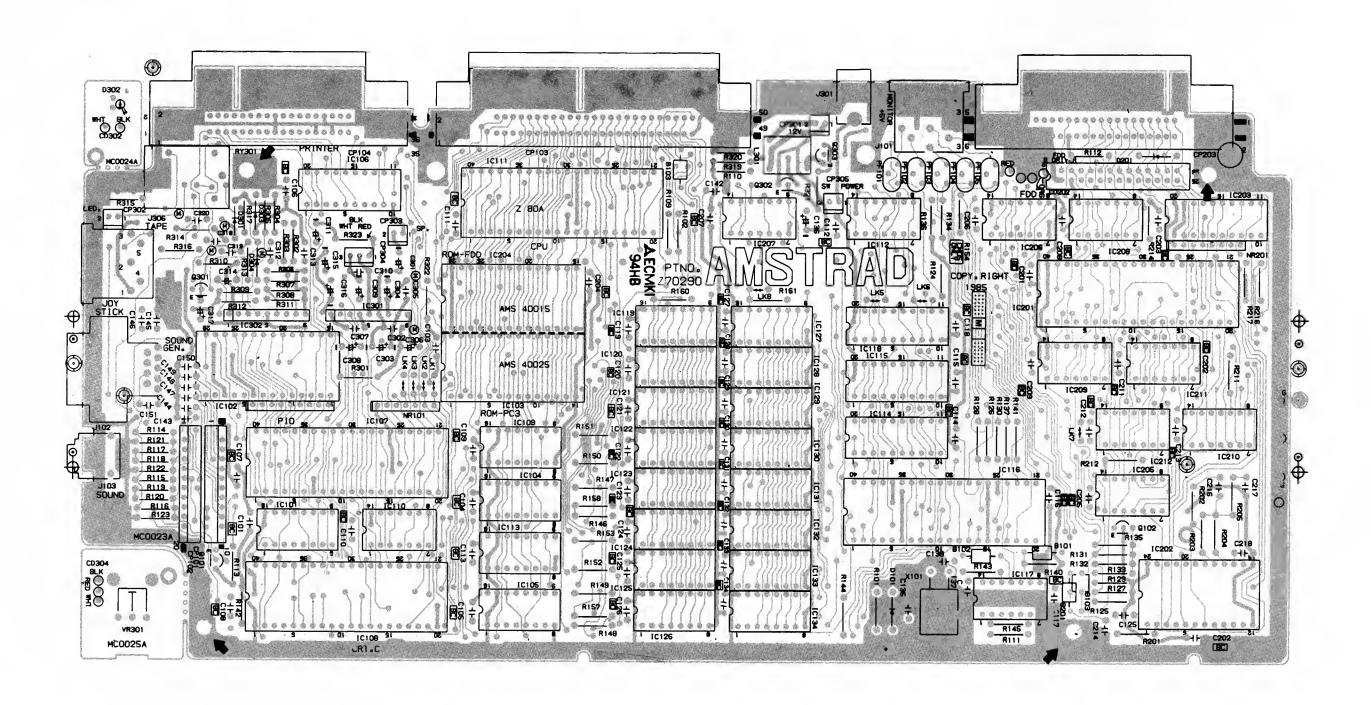


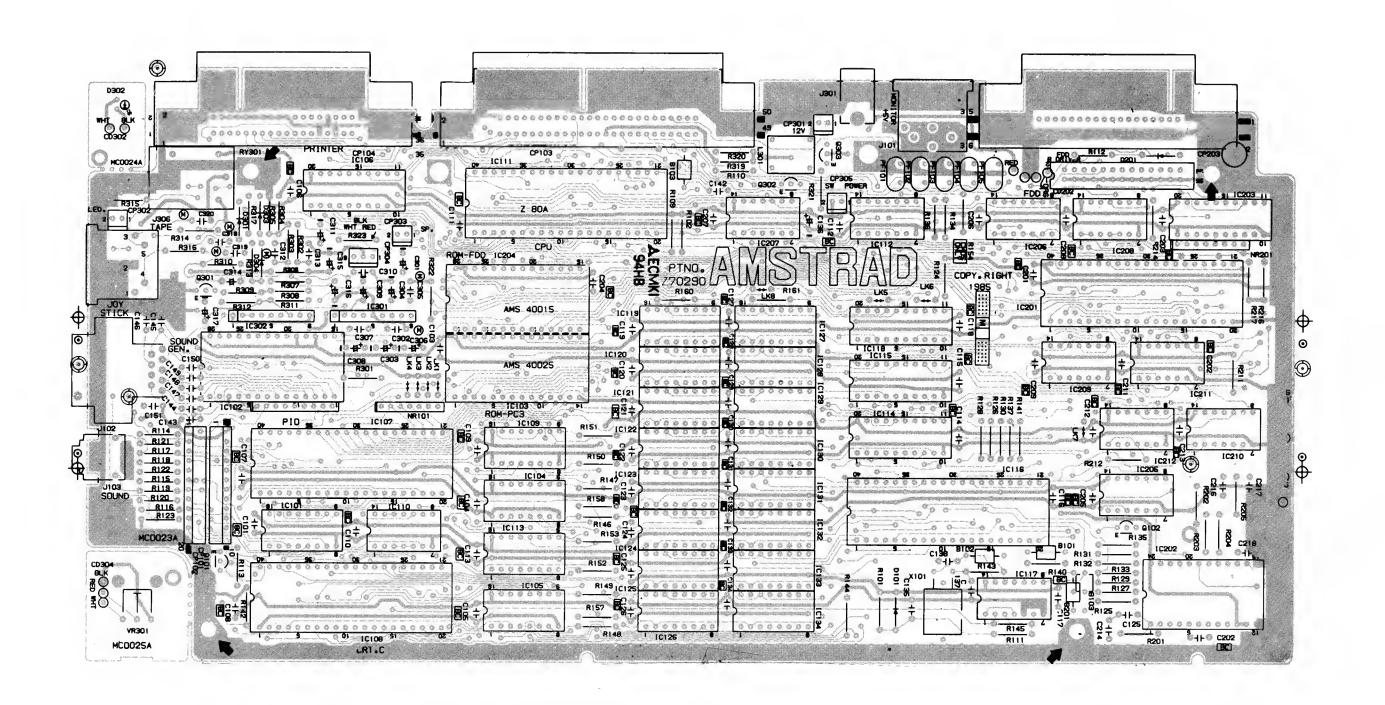
# **CPC464 TAPE AMP SECTION CHASSIS SCHEMATIC DIAGRAM**



#### **CPC6128 CHASSIS SCHEMATIC DIAGRAM**







SYMBLE LIST

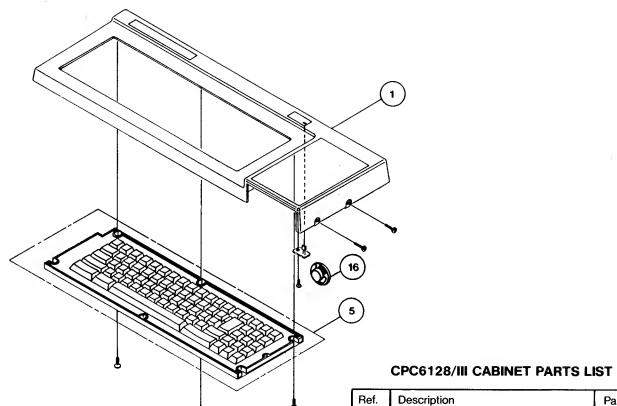
RESISTOR		
SEMI-FIXED RESISTOR	ļ	
CAPACITOR		+
JUMPER	←>	

# CPC6128 SECTION

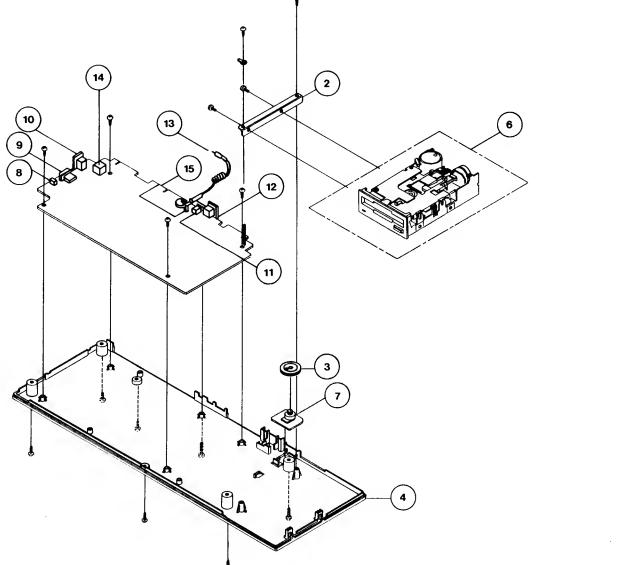
# CPC6128/III ELECTRICAL PARTS LIST

Ref. No.	Description	Part No
IC's		
IC101	IC Amstrad 40226	4022
IC102	IC TMP-8255AP	17010
IC103	IC AY-3-8912	4000
IC104	IC DN74LS145	17010
IC105	IC Z8400APS	4008
IC106	IC DN74LS174	17138
IC107	IC DN74LS175	17608
IC108	IC Amstrad 40025	4002
IC109-124	IC KM4164B	170110
IC201	IC Z765APS	40018
IC202, 203	IC DN74LS38	40019
IC204	IC TC74HC14AP	171033
IC205	IC Amstrad 40015	40015
IC206	IC SED9420CAC	171034
IC301	IC LA6358S	170814
IC302	IC LA4140	17011
Transistors		
Q101, 102, 104,	TR KTC1815	170447
201		
Q103	TR KTA950Y	170448
Diodes		
D101, 301, 302	D 1S2472T	170115
D303	D 10E1 FA8	170865
D304	LED SLP-155B	170866
Crystals	* · · · · · · · · · · · · · · · · · · ·	
X101	Crystal HC-49/U 16.00MHz	170908

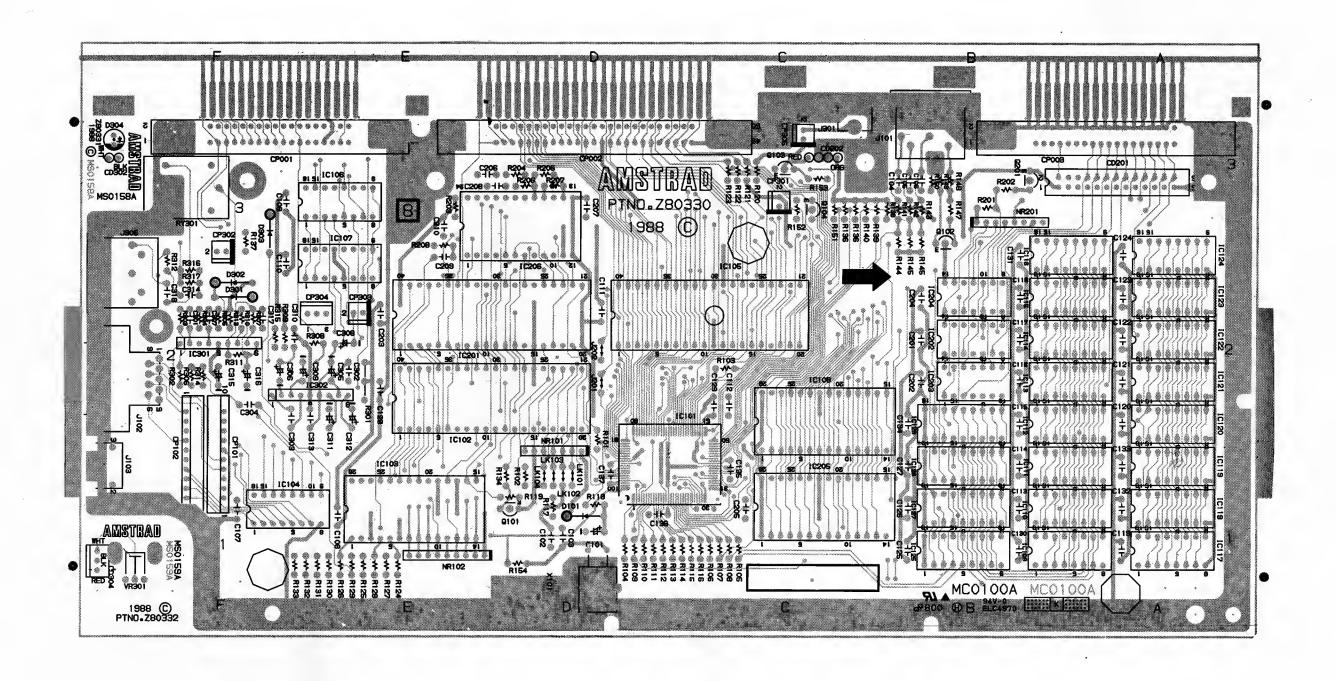
	Ref No.	Description	Part No.
	Sockets		
	J101 J102 J103 J301 J306	Jack DIN Socket D Sub 9 Jack, RCA 3.5 Jack, DC Jack, DIN	170025 170023 170022 170024 170850
	Variable Resi	stors	
	VR301	VR, Rotary 20kΩ	170807
	Switches		
	SW101 SW301	Switch, Keyboard Switch, Slide	170858 170906
	Fuses		<del></del>
	R301	Fuse 4.7Ω	170866
	Miscellaneous		
	FDD201 RY301 SP301 NR101 NR102 NR201	Floppy Disc Drive EME-156V Relay Speaker Resistor Network $2.2k\Omega \times 6$ Resistor Network $2.2k\Omega \times 8$ Resistor Network $680\Omega \times 6$	190005 170123 170124 170131 170132 170133
- 7			

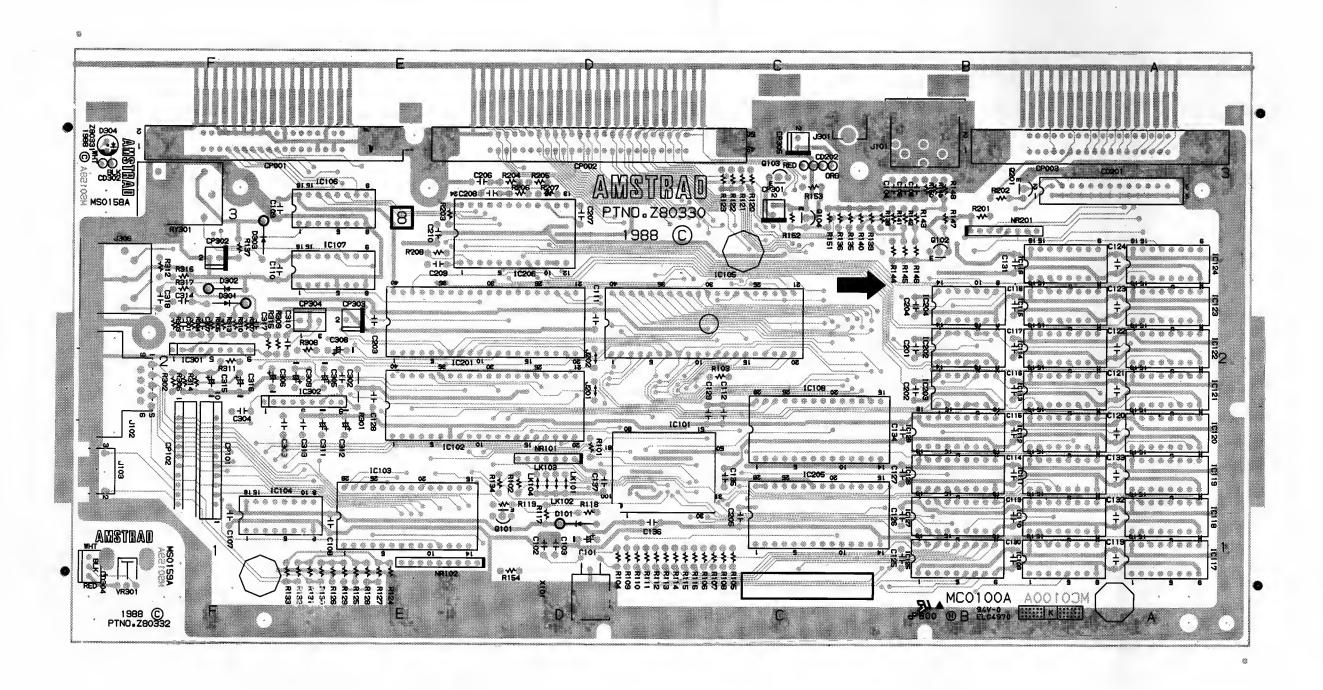


Ref.	Description	Part No.
1	Cabinet, Top Assembly	170901
2	Frame, FDD	171007
3	Knob, Volume	170902
4	Cabinet, Bottom Assembly	170903
L		

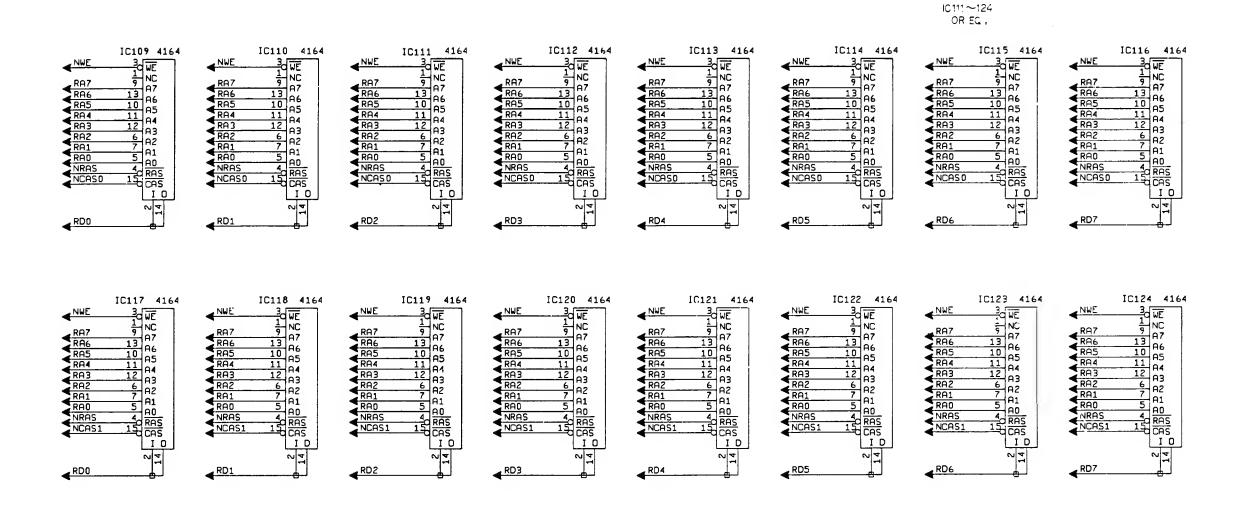


# CPC6128 MAIN/LED/VOLUME P.C.B. (Top View)

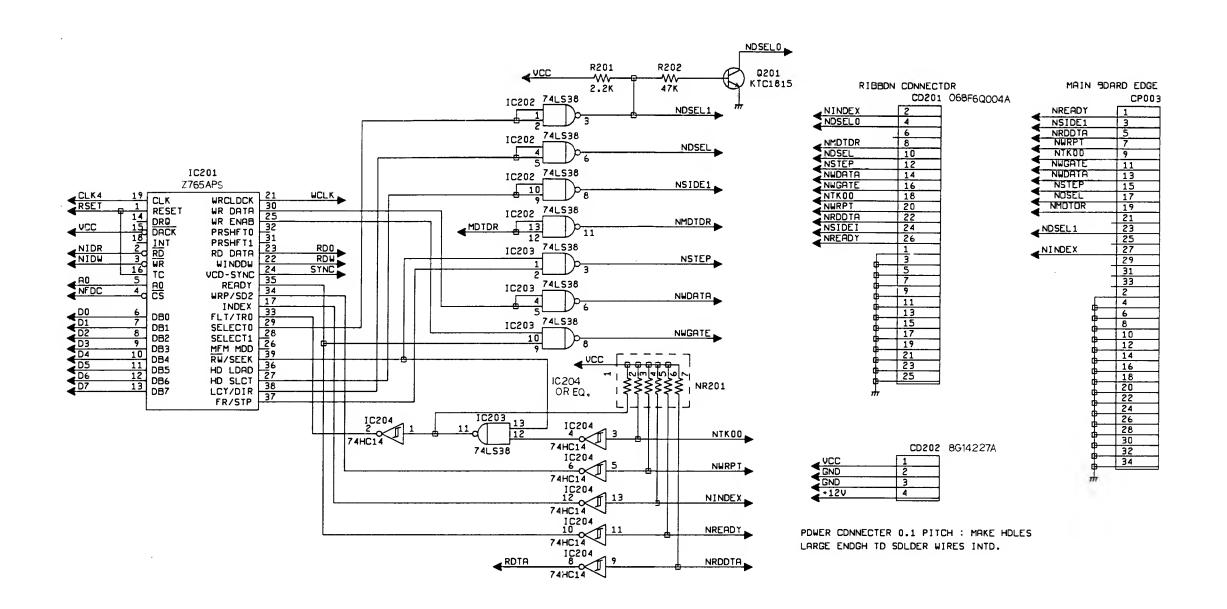




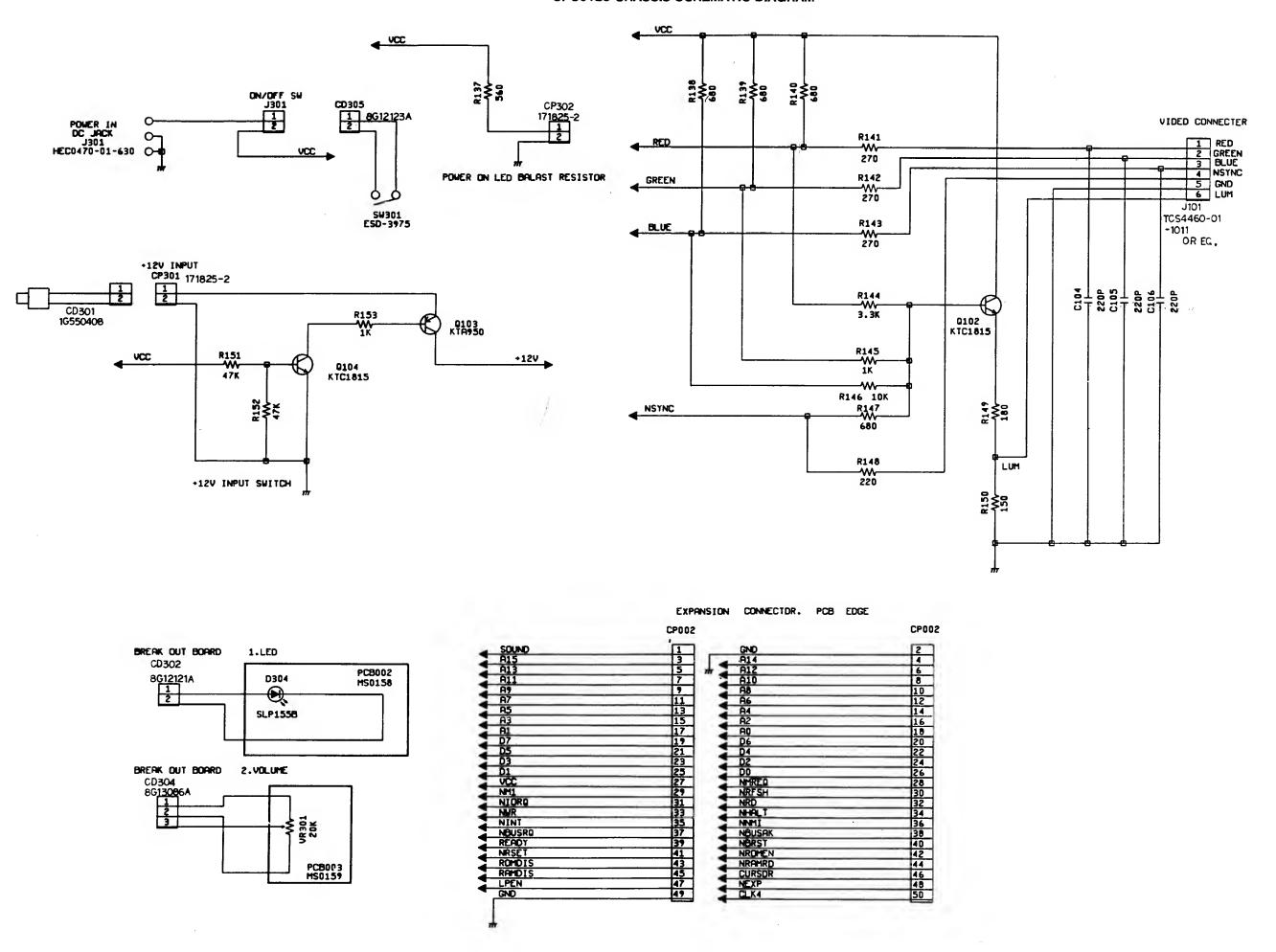
#### **CPC6128 RAM SECTION CHASSIS SCHEMATIC DIAGRAM**



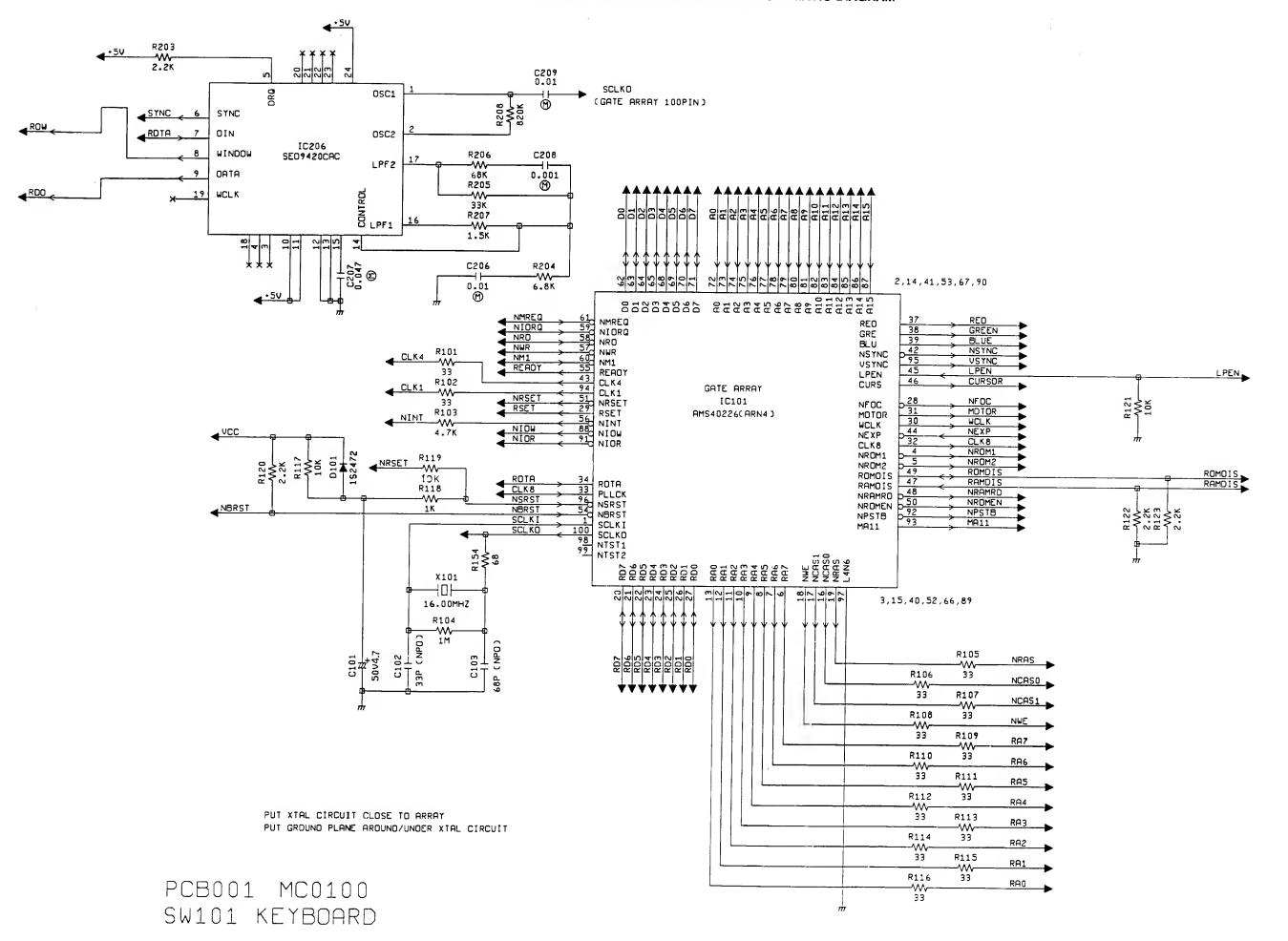
#### **CPC6128 CPU SECTION CHASSIS SCHEMATIC DIAGRAM**

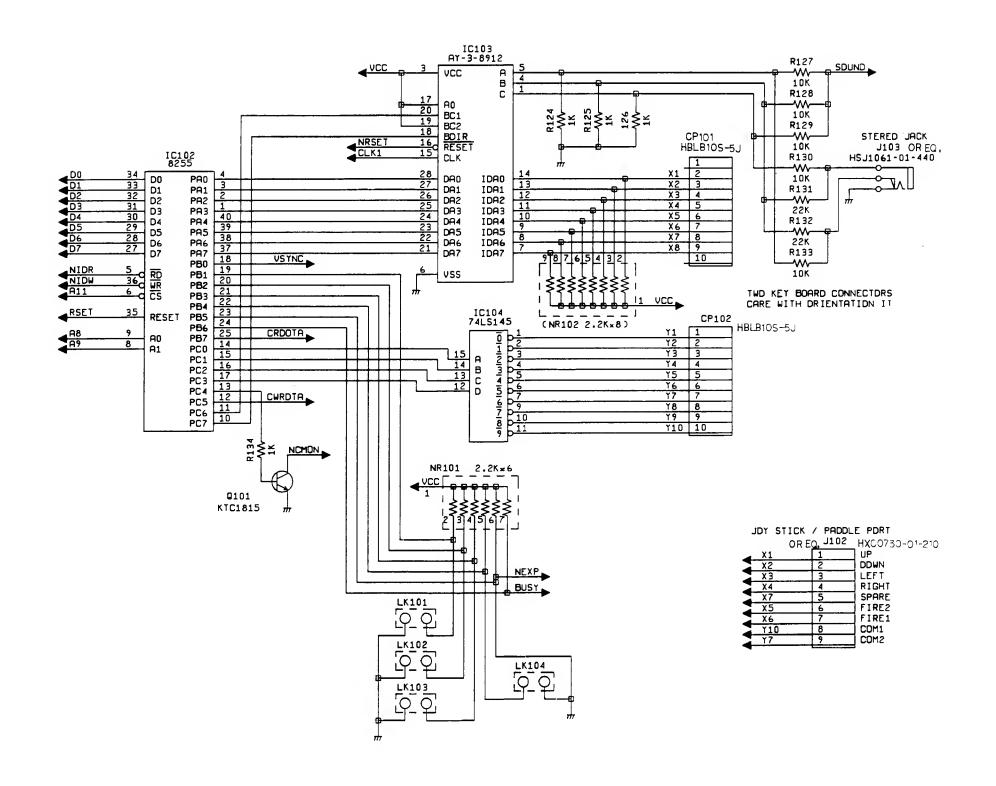


#### **CPC6128 CHASSIS SCHEMATIC DIAGRAM**

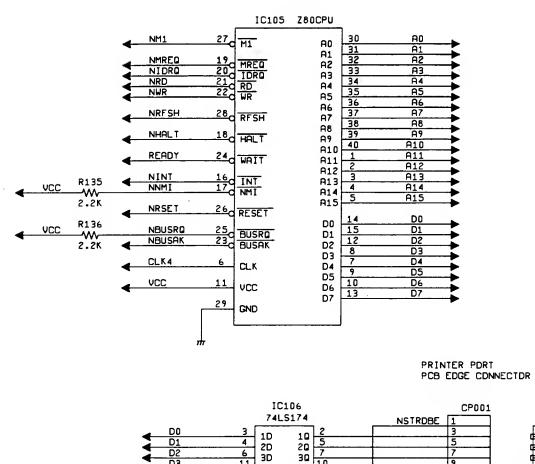


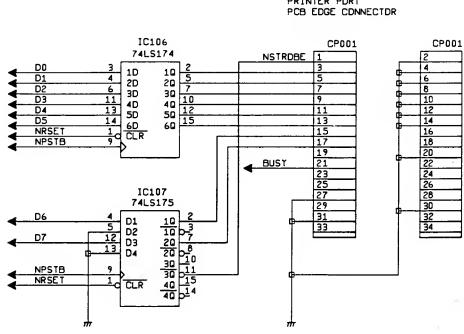
# CPC6128 ULA/DS SECTION CHASSIS SCHEMATIC DIAGRAM



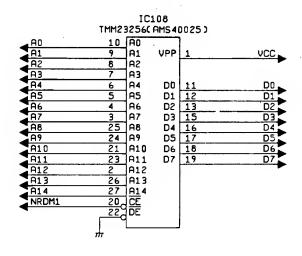


#### CPC6128 CPU/ROM SECTION CHASSIS SCHEMATIC DIAGRAM

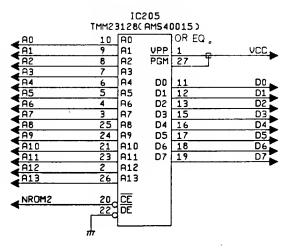


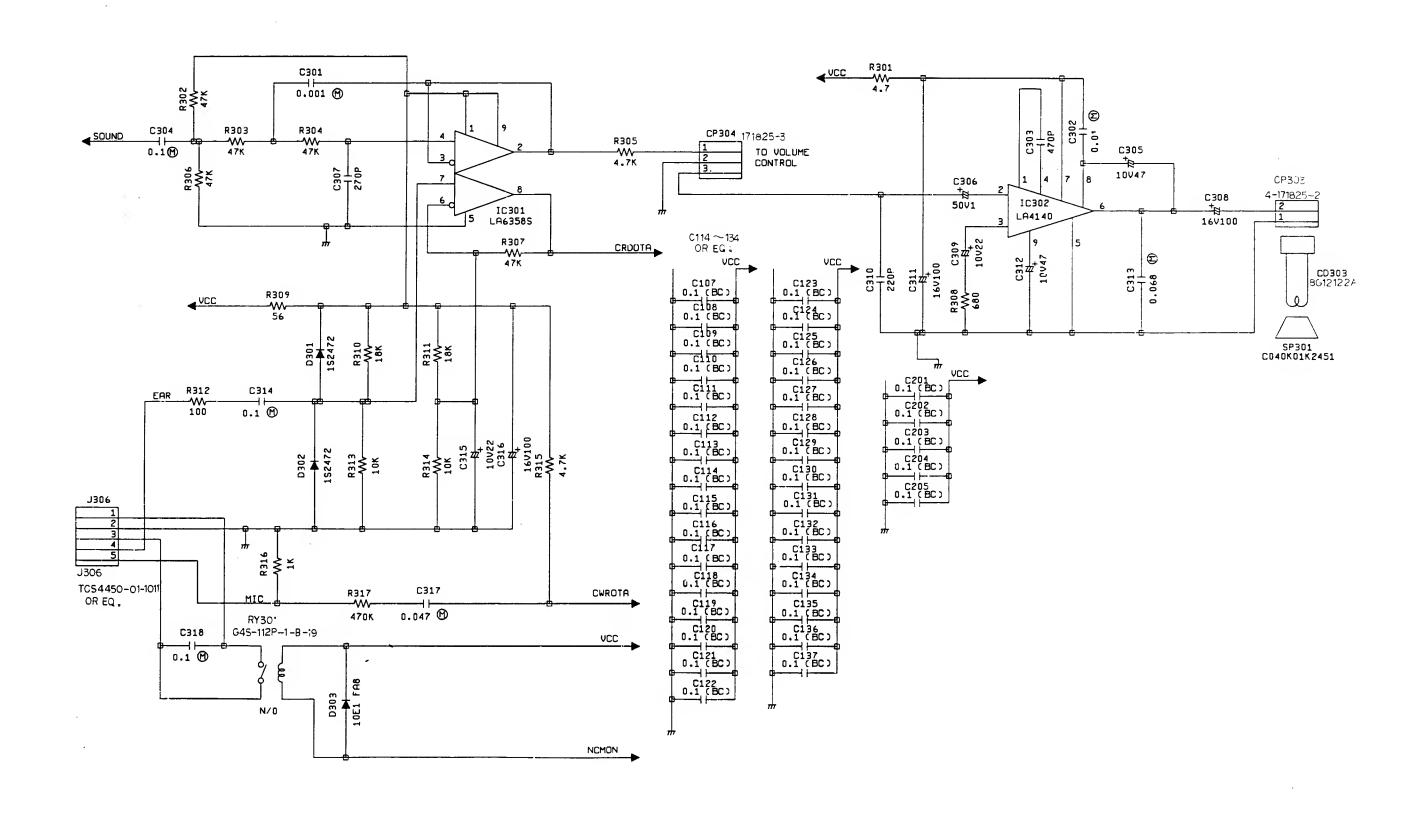


SYSTEM RDM.APPEARS AT TWD ADDRESSES 0000-3FFF AND D000-FFFF

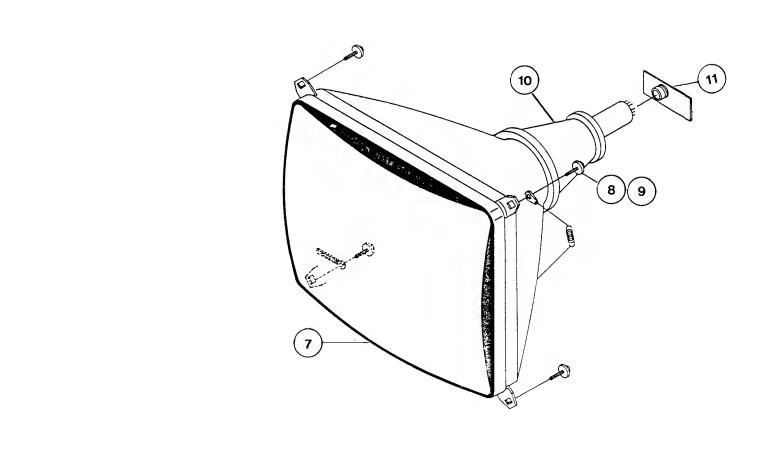


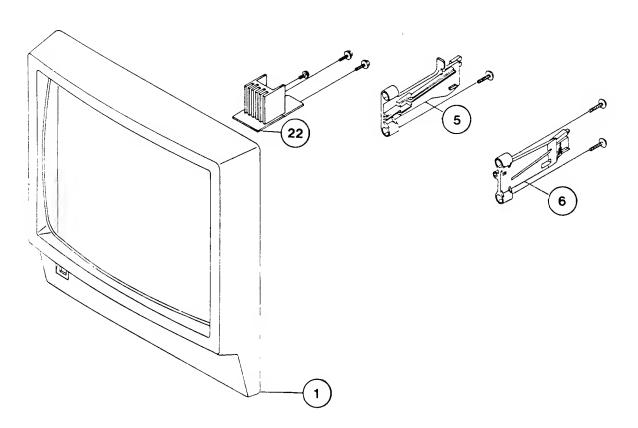
FLDPY DISC CONTROLER RDM

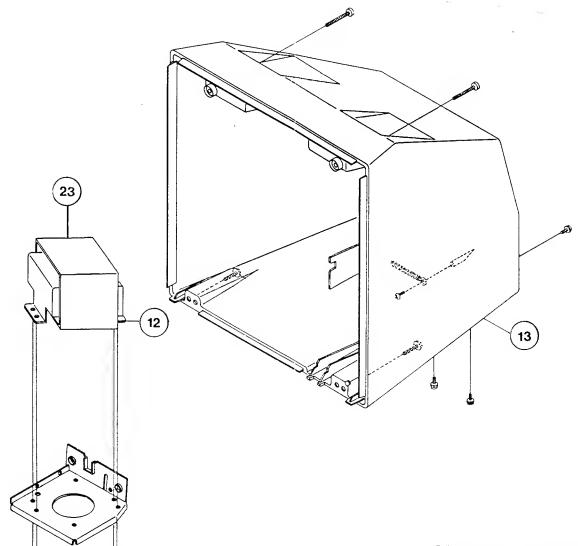


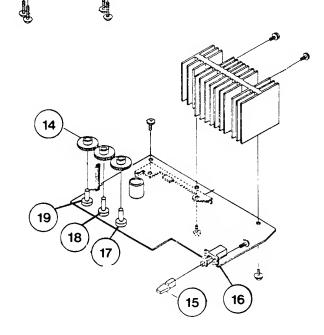


# GT65 SECTION









# GT65 CABINET PARTS LIST

Ref.	Description	Part No.
1	Front Cabinet	170150
2	Cable Clamp	170502
5	Bracket PCB (L)	170153
6	Bracket PCB (R)	170154
7	CRT Green	<b>17</b> 0507
8	Metal Washer CRT	170508
9	Fixing Screw CRT	170509
10	Deflection Yoke	170510
11	CRT Socket	170511
12	Power Transformer	S/170832
13	Rear Cabinet	170155
14	Control Knob	170514
15	Button Power	170515
16	On/Off Switch	170516
17	V. Hold Pot.	170833
18	Contrast Pot.	170518
19	Brightness Pot.	170519
20	D.C. Cord	170516
21	DIN Cord	170157
22	D.C. Jack	170834
23	u Metal Shield	170512/SH

Miscellaneous

FB701	Transformer Flyback 0420120041	170158
TH702	Thermistor SDT100	170159

# CTM644 ELECTRICAL PARTS LIST

Ref. No.   Description   Part No.   IC's     C401			<del>                                     </del>		
IC401	Ref. No.	Description	Part No.		
IC402	IC's				
IC501			1400106		
IC502   IC L78MG   170446   1422278   IC503   IC UPC78M12   1422278   IC503   ITR KTC1815-T   170447   170448   1422278   ITR 2SA950Y   170448   170449   170449   170449   170449   170449   170450					
IC UPC78M12	1	•			
Transistors	1				
Q401, 402, 506	Transistors				
Q403		LTD KTC1015 T	1 170447		
Q404			1		
G501					
Q502			170450		
Q503, 505		•			
Q504   TR 2SC2120Y   170113   170454   170454   170454   170454   170455   170455   1400124   170455   1400124   170456   170458   170456   170456   170456   170456   170456   170456   170458   170456   1704					
Diodes					
D401, 410, 411         D IS2472T-77         170455           D402         DZ GZA11 Y BT         1400124           D405, 407, 408         D DFD05G         170456           D406         D BB4-FC         1422116           D505, 507         DZ RD3.6FB         170458           D505, 507         DZ RD3.6FB         170458           D506, 508         D DFC10E-KB4         1422115           D509         D RGP-30J-5001L         170459           D511, 512         D RGP30J-5001L         170459           D511, 512         D RGP30J-5001L         170459           D901-903         DZ GZA6.2 Y BT         1422114           Coils           L401         Coil Linearity 21000002         170134           L501         Filter Line Across FK0b160MH14         1400130           L502         Coil Degauss 8D140013         170842           L801         Coil Choke 100µH         1400148           T401         Trans Hori. Drive 305Y001         170845           Switches           SW401         Switch, Slide SS-009-7H         900101           SW501         Switch, Push ESB-90197S         *170306           Switches <td <="" colspan="2" td=""><td>Q801-803</td><td></td><td></td></td>	<td>Q801-803</td> <td></td> <td></td>		Q801-803		
D402	Diodes		+		
D402	D401, 410, 411	D  S2472T-77	170455		
D406   D BB4-FC   D501-504   D 20E10   170848   D505, 507   DZ RD3.6FB   170458   D506, 508   D DFC10E-KB4   1422115   D509   D RGP-30J-5001L   170459   D510   D SR-2M Avalanch   1400122   D511, 512   D RGP30G-5001L   170459   D901-903   DZ GZA6.2 Y BT   D502   Coil Linearity 21000002   170134   L501   Filter Line Across FK0b160MH14   L502   Coil Degauss 8D140013   170842   L801   Coil Choke 100µH   1400148   T501   Trans Hori. Drive 305Y001   170463   Trans Switching 8142006   T70845   Switches   SW401   Switch, Push ESB-90197S   Switch   Switch, Push ESB-90197S   T70306   Sockets   J501   Jack HEC0630-01-010   170844   J70306   Sockets   J501   Jack HEC0630-01-010   170844   J70306   Sockets   J501   Jack HEC0630-01-010   170844   J70306   J703	D402				
D501-504   D 20E10   170848   D505, 507   DZ RD3.6FB   170458   D506, 508   D DFC10E-KB4   1422115   D509   D RGP-30J-5001L   170459   D510   D SR-2M Avalanch   1400122   D511, 512   D RGP30G-5001L   170459   D901-903   DZ GZA6.2 Y BT   1422114   T0459   D7601   D760					
D505, 507   DZ RD3.6FB   170458   D506, 508   D DFC10E-KB4   1422115   D509   D RGP-30J-5001L   170459   D511   D SR-2M Avalanch   1400122   D511, 512   D RGP30G-5001L   170459   D901-903   DZ GZA6.2 Y BT   1422114		1 · · -			
D506, 508   D FC10E-KB4   1422115   D509   D RGP-30J-5001L   170459   D SR-2M Avalanch   1400122   170459   D901-903   DZ GZA6.2 Y BT   1422114   Coils	_				
D509   D RGP-30J-5001L   170459   D510   D SR-2M Avalanch   1400122   170459   D901-903   DZ GZA6.2 Y BT   1422114					
	1	1	1		
D901-903         DZ GZA6.2 Y BT         1422114           Coils           L401         Coil Linearity 21000002         170134           L501         Filter Line Across FK0b160MH14         1400130           L502         Coil Degauss 8D140013         170842           L801         Coil Choke 100µH         1400148           T401         Trans Hori. Drive 305Y001         170463           T501         Trans Switching 8142006         170845           Switches           SW401         Switch, Slide SS-009-7H         900101           SW501         Switch, Push ESB-90197S         *170306           Sockets           J501         Jack HEC0630-01-010         170844           J801         CRT Socket HPS0171         170844-2           VR401         VR Rot 500Ω 25B52         170315           VR402, 404         VR SF 5kΩ         1400227           VR403         VR SF 5kΩ VOAA00B53         170135           VR405         VR Rot 20kΩ K121K0Z21         1400035           VR801         VR SF 5kΩ Red         1400197           VR802         VR SF 5kΩ Blue         1400199           VR803         VR SF 5kΩ Red         1400200			1400122		
Coils           L401         Coil Linearity 21000002         170134           L501         Filter Line Across FK0b160MH14         1400130           L502         Coil Degauss 8D140013         170842           L801         Coil Choke 100µH         1400148           T401         Trans Hori. Drive 305Y001         170463           T501         Trans Switching 8142006         170845           Switches           SW401         Switch, Slide SS-009-7H         900101           SW501         Switch, Push ESB-90197S         *170306           Sockets           J501         Jack HEC0630-01-010         170844           J801         CRT Socket HPS0171         170843-2           Variable Resistors           VR401         VR Rot 500Ω 25B52         170315           VR402, 404         VR SF 5kΩ VOAA00B53         170135           VR403         VR SF 5kΩ VOAA00B53         170135           VR405         VR Rot 20kΩ K121K0Z21         1400035           VR305         VR SF 5kΩ Red         1400198           VR802         VR SF 5kΩ Green         1400198           VR803         VR SF 5kΩ Blue         1400200	1 '				
L401       Coil Linearity 21000002       170134         L501       Filter Line Across FK0b160MH14       1400130         L502       Coil Degauss 8D140013       170842         L801       Coil Choke 100µH       1400148         T401       Trans Hori. Drive 305Y001       170463         T501       Trans Switching 8142006       170845         Switches         SW401       Switch, Slide SS-009-7H       900101         SW501       Switch, Push ESB-90197S       *170306         Sockets         J301       Jack HEC0630-01-010       170844         J801       CRT Socket HPS0171       170843-2         Variable Resistors         VR401       VR Rot 500 $\Omega$ 25B52       170315         VR402, 404       VR Rot 500 $\Omega$ 25B52       1400227         VR403       VR SF 5k $\Omega$ VOAA00B53       17035         VR405       VR Rot 20k $\Omega$ K121K0Z21       1400035         VR406       VR 1k $\Omega$ A00B13       170466         VR801       VR SF 5k $\Omega$ Red       1400198         VR802       VR SF 5k $\Omega$ Blue       1400199         VR803       VR SF 5k $\Omega$ Blue       1400200         VR805       VR SF 5k $\Omega$ Blue <td< td=""><td></td><td>DZ GZA6.2 Y B1</td><td>1422114</td></td<>		DZ GZA6.2 Y B1	1422114		
L501       Filter Line Across FK0b160MH14       1400130         L502       Coil Degauss 8D140013       170842         L801       Coil Choke 100µH       1400148         T401       Trans Hori. Drive 305Y001       170463         T501       Trans Switching 8142006       170845         Switches         SW401       Switch, Slide SS-009-7H       900101         SW501       Switch, Push ESB-90197S       *170306         Sockets         J501       Jack HEC0630-01-010       170844         J801       CRT Socket HPS0171       170843-2         Variable Resistors         VR401       VR Rot $500\Omega$ 25B52       170315         VR402, 404       VR SF $5k\Omega$ 1400227         VR403       VR SF $5k\Omega$ VOAA00B53       170135         VR404       VR Rot $20k\Omega$ K121K0Z21       1400035         VR406       VR Rot $20k\Omega$ K121K0Z21       1400035         VR801       VR SF $5k\Omega$ Red       1400197         VR802       VR SF $5k\Omega$ Blue       1400198         VR803       VR SF $5k\Omega$ Blue       1400200         VR805       VR SF $5k\Omega$ Blue       1400200         VR805       VR SF $5k\Omega$ Blue       1400201		• -			
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Switches           SW401         Switch, Slide SS-009-7H         900101           SW501         Switch, Push ESB-90197S         *170306           Sockets           J501         Jack HEC0630-01-010         170844           J801         CRT Socket HPS0171         170843-2           Variable Resistors           VR401         VR Rot 500Ω 25B52         170315           VR402, 404         VR SF 5kΩ         1400227           VR403         VR SF 5kΩ VOAA00B53         170135           VR405         VR Rot 20kΩ K121K0Z21         1400035           VR406         VR 1kΩ A00B13         170466           VR801         VR SF 5kΩ Red         1400197           VR802         VR SF 5kΩ Red         1400198           VR803         VR SF 5kΩ Blue         1400199           VR804         VR SF 5kΩ Blue         1400200           VR805         VR SF 5kΩ Blue         1400201					
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SW501         Switch, Push ESB-90197S         *170306           Sockets           J501         Jack HEC0630-01-010         170844           J801         CRT Socket HPS0171         170843-2           Variable Resistors           VR401         VR Rot 500 $\Omega$ 25B52         170315           VR402, 404         VR SF 5k $\Omega$ 1400227           VR403         VR SF 5k $\Omega$ VOAA00B53         170135           VR405         VR Rot 20k $\Omega$ K121K0Z21         140035           VR406         VR 1k $\Omega$ A00B13         170466           VR801         VR SF 5k $\Omega$ Red         1400197           VR802         VR SF 5k $\Omega$ Green         1400198           VR803         VR SF 5k $\Omega$ Blue         1400199           VR804         VR SF 5k $\Omega$ Red         1400200           VR805         VR SF 5k $\Omega$ Blue         1400201	Switches		J		
Sockets           J501         Jack HEC0630-01-010         170844           J801         CRT Socket HPS0171         170843-2           Variable Resistors           VR401         VR Rot 500Ω 25B52         170315           VR402, 404         VR SF 5kΩ         1400227           VR403         VR SF 5kΩ VOAA00B53         170135           VR405         VR Rot 20kΩ K121K0Z21         1400035           VR406         VR 1kΩ A00B13         170466           VR801         VR SF 5kΩ Red         1400197           VR802         VR SF 5kΩ Green         1400198           VR803         VR SF 5kΩ Blue         1400199           VR804         VR SF 5kΩ Red         1400200           VR805         VR SF 5kΩ Blue         1400201	SW401	Switch, Slide SS-009-7H	900101		
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	J801	CRT Socket HPS0171	170843-2		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Variable Resisto	rs			
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VR801       VR SF $5$ k $\Omega$ Red       1400197         VR802       VR SF $5$ k $\Omega$ Green       1400198         VR803       VR SF $5$ k $\Omega$ Blue       1400199         VR804       VR SF $5$ k $\Omega$ Red       1400200         VR805       VR SF $5$ k $\Omega$ Blue       1400201         Fuses					
VR802       VR SF 5kΩ Green       1400198         VR803       VR SF 5kΩ Blue       1400199         VR804       VR SF 5kΩ Red       1400200         VR805       VR SF 5kΩ Blue       1400201    Fuses	· ·				
VR804       VR SF 5kΩ Red       1400200         VR805       VR SF 5kΩ Blue       1400201         Fuses	-	VR SF 5kΩ Green			
VR805 VR SF 5kΩ Blue 1400201 <b>Fuses</b>					
Fuses					
		AU OL OK71 Bine	1400201		
Fuse FST 2A(T) 250V 1400253					
	F501	Fuse FST 2A(T) 250V	1400253		

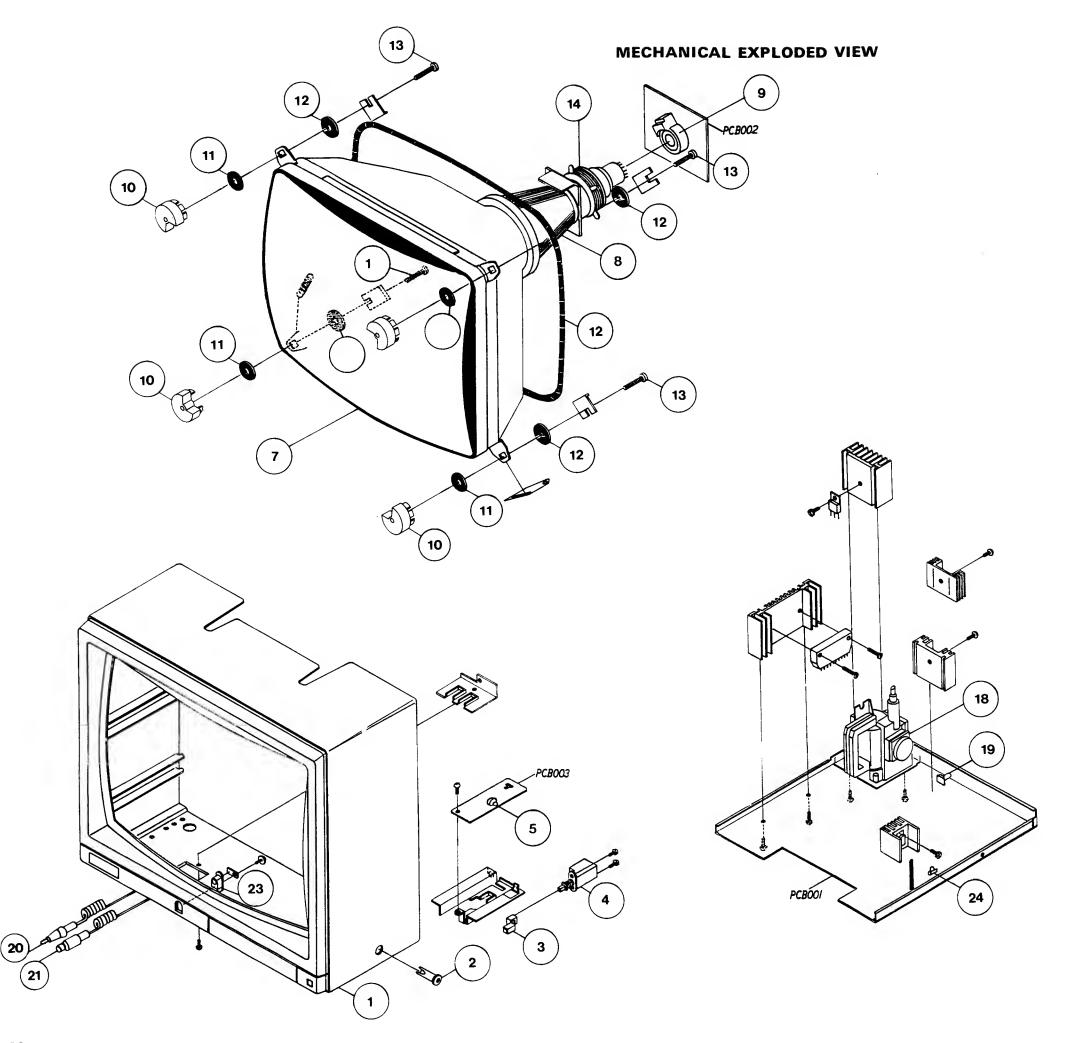
Description	Ref. No.	Part No.
Metal Oxide Re	esistors	
0.27Ω/2W 1Ω/3W 10Ω/¼W 15Ω/2W 33Ω/2W 220Ω/2W 1kΩ/3W 1.8kΩ/2W 3.9kΩ/1W	R513 R502 R511 R512 R509 R433 R503 R427 R505 R805, 808, 812	171071 170416 10008 170410 170411 809229 176557 170137 170407 170408
Fuse Resistors		<u> </u>
0.82Ω/1W 3.3Ω/½W 8.2Ω/¼W 33Ω/½W	R437 R438 R444 R520	1422141 170138 170404 175065
Cement Resiste	ors	-
15Ω/7W	R436	170417
0.1μF/250V 0.82μF/200V 0.82μF/1.6kV Polyester Capac	C506 C430 C425 C512 C505 C507 C515 C405 C519 C402, 522 C518 C424   C415  Clene Capacitors  C501 C429 C431  Citors	1422152 170419 1422157 171089 170423 20035 170851 176358 20044 1422262 130105 170425 174818
0.15μF/100V	C422	170140
Ceramic Capaci 2200pF/4kV 0.001μF/2kV 0.0015μF/2kV 0.0022μF/2kV	tors C513 C511, 801 C432, 510, 514 C502-504	170430 1422147 170432 140023
Ref. 'No.	Description	Part No.
Miscellaneous		
FB401 TH501 V001 ICP501 ICP502 CD005 CD007	Transformer Flyback 3714009 Degauss Element Tube Cathode Ray A34JLL70X10 ICP-N20 ICP-N38 Cord DC Cord DIN	170468 1400195 170307-A 150442 170136 170316/A 170317/A

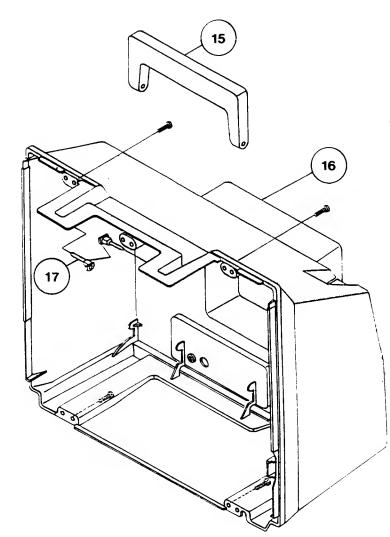
# CTM644 SECTION

# **CTM644 ALIGNMENT INSTRUCTIONS**

STEP	FUNCTION	SIGNAL IN	SIGNAL OUT	METHOD	REMARKS
1.	Black and White Tracking.		Monitor Screen.	Turn R & B Drive Controls VR804 & VR805 fully counterclockwise.     Turn R, G & B Bias Controls VR801, 802, 803 fully counterclockwise.     Set Ser. Nor. Switch to Ser. position.	Monitor connected to CPC464.
2.	Black & White Tracking.		Monitor Screen. Monitor Oscilloscope.	1. Adjust 120V at the collector of 0802 with Brightness Control on the Oscilloscope. 2. Rotate the screen control to fully counterclockwise 8 bring it back to obtain a dim line of one prominent colour. 3. Rotate the other two colours till a dim white line is obtained. 4. Bring Ser. Nor. Switch to Nor. position.	Monitor connected to CPC464.  If required, adjust the colour control.
3.			If no satisfacto	ory results repeat step 2.	
4.	Vertical Size.	Program the paper edge.	Monitor Screen.	Adjust VR406 to obtain paper edge to be 145mm.	Use non magnetic ruler.
5.	Focus Adjustment.	Program the paper edge.	Monitor Screen.	Adjust Focus Control on the Flyback Tx for maximum definition & details.	Brightness & Contrast controls set to normal viewing.
6.	5V Adjustment.	Switch on the Monitor.	A.V.O. Meter.	Connect A.V.O. across C518 & adjust VR501 to obtain 5V exactly.	
			This adjustment (6) should no	t be disturbed under normal conditions.	
7.	Sub Brightness Control.	Switch on the Monitor,	A.V.O. Meter.	Connect A.V.O. to collector of O802. Adjust VR402 to read 123V - 124V.	Keep Brightness Control to maximum position,
8.	Sub H. Hold & H. Hold Adjustment.	Switch on the Monitor.	Frequency Counter.	Rotate H. Hold fully counterclockwise, 1. Adjust VR404 to read 14500Hz. 2. Adjust VR403 to read 15625Hz,	Read the Meter across CRT Heater & Earth.

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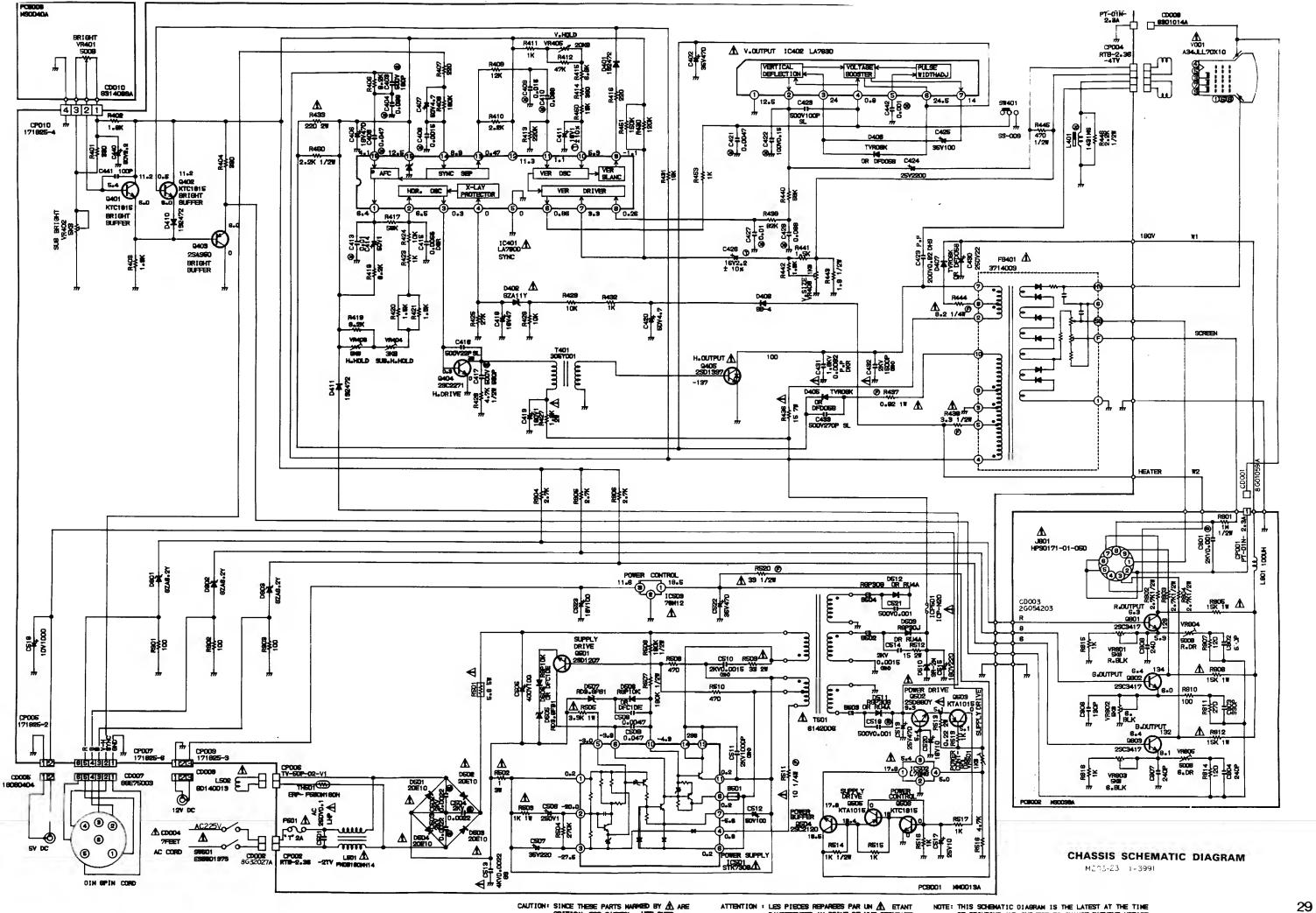


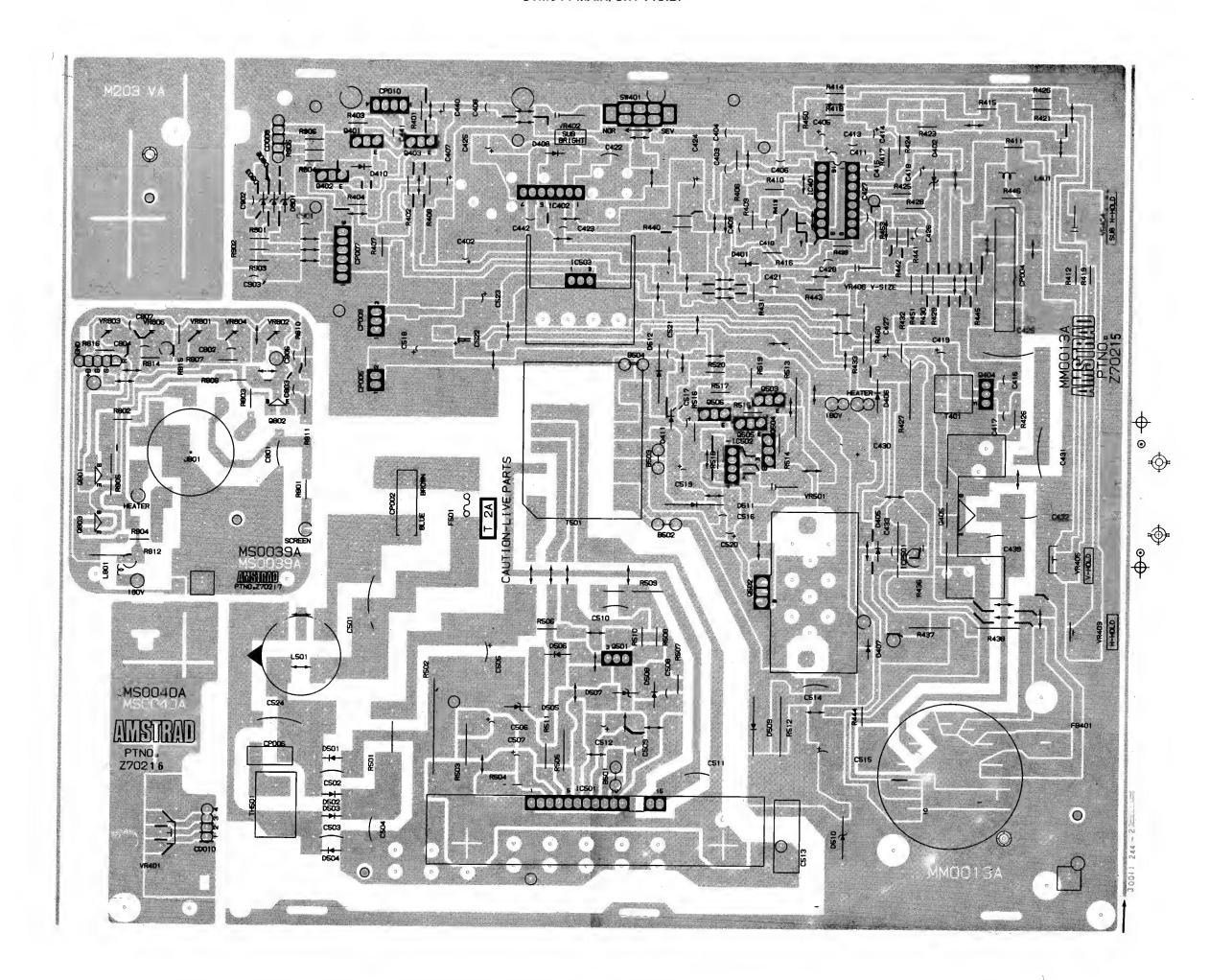


# CTM644 MkII CABINET PARTS LIST

Ref.	Description	Part No.
1 2 3 15	Cabinet Front Knob Control Button, Push Handle	170841/A 170304 170305 170312
16	Cabinet, Back	170312/A

\*For parts not listed above please refer to original manual





# **MAJOR COMPONENTS LOCATION GUIDE**

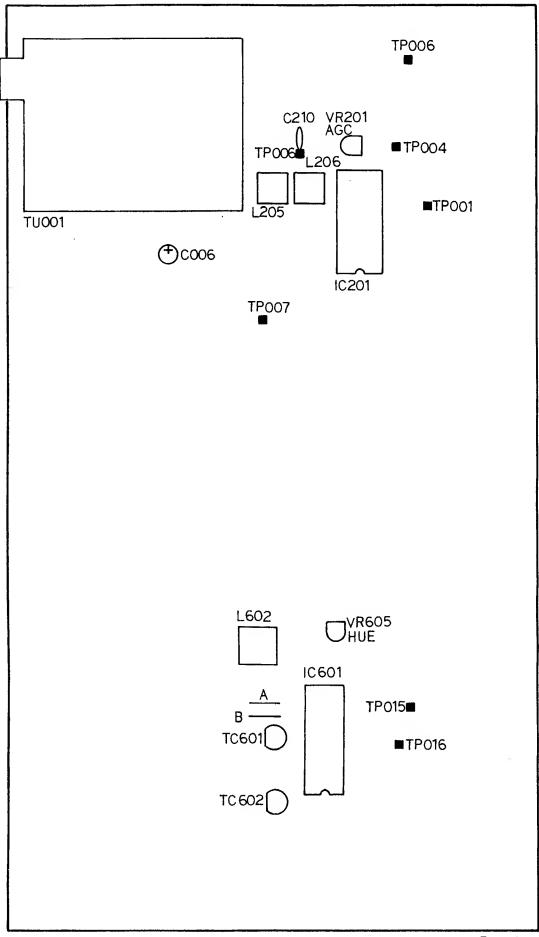


Fig. 1

# MP3 SECTION

## **MP3 ALIGNMENT INSTRUCTIONS**

Equipment required: D.B. O'scope; A.V.O.; Pattern Generator; Sweep Mark Generator.

STEP	FUNCTION	SIGNAL IN	SIGNAL OUT	METHOD	REMARKS
1.	A.F.T. Adjustment.	_	T.P. on the Tuner Pack.	Adjust L205 to read fixed voltage at TP006 using A.F.T. Switch from off to on.	_
2.	R.F. A.G.C. Adjustment.	Test Pattern at 80dB.	T.P.005	Adjust VR201 to read 3.9V on A.G.C. pin on the Tuner.	_
3.	Hue Delay Adjustment.	Test Signal from Pattern Generator to Aerial in Socket.	At points "A" & "B" across Video Buffer circuitry Q602, Q603.	Set VR601-1 to max. wave form on the 'scope using VR605, TC6022, L602 to straight lines.	_
4.	A.P.C. Adjustment.	Test Signal from Pattern Generator to Aerial in Socket. Colour Bar selected.	'Scope TP015 & TP016.	Adjust TC601 to max. output on the 'scope.	_
5.	Video I.F. adjustment.	Test Signal from Pattern Generator to Aerial in Socket. Standard Signat	O'scope.	i) Connect 10kΩ variable between TP004 & ground. ii) Adjust L206 to obtain max. output on the response curve "A" at 39.5MHz. iii) Connect 100Ω between TP009 & PT010. Adjust IFT on Tuner to obtain max. output in Waveform "B". iv) Disconnect 10Ω variable & 100Ω resistors. Short C006 & C210 and reconnect sweep gen. to `i'P007 & TP006. v) Adjust L502 to ptace 39.5MHz marker on the ref. line on the response curve, "C". vi) Disconnect short between C006 & C210.	Connect H & V outputs of sweep gen. to test point TP001 and ground to TP007. Control signal in to prevent A.G.C. Set A.F.T. switch to on.

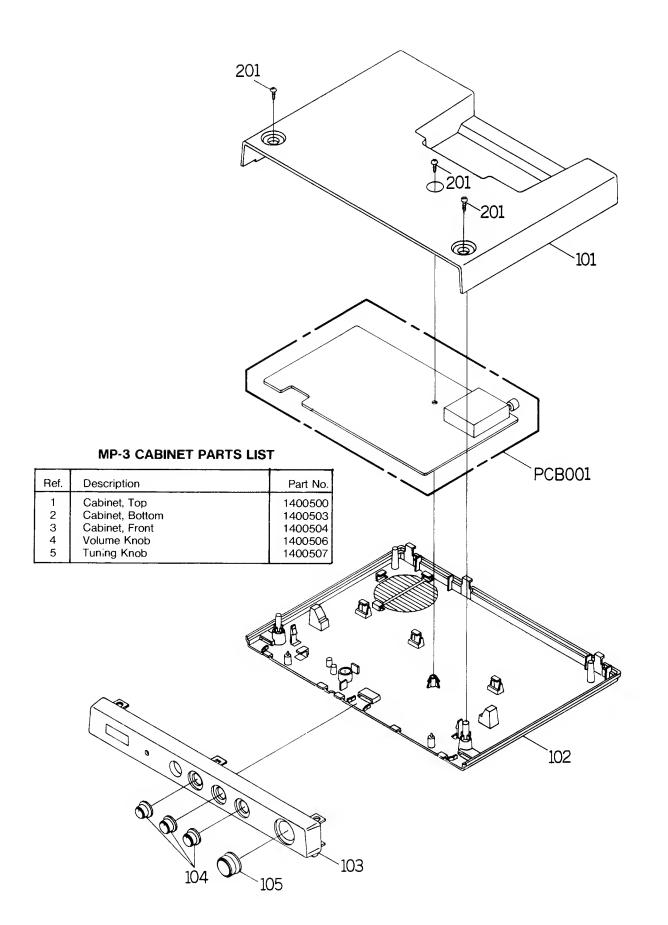
## MP3 ELECTRICAL PARTS LIST

Ref. No.	Description	Part No.			
IC's					
IC201 IC351 IC401 IC501 IC502 IC601 IC602	IC LA7520N IC LA4140 IC M52684AP IC UPC574J-T IC LB8555D IC AN5620X IC AN5612	1409198 1400511 1400512 1400513 1400514 1400104 1400105			
Transistors					
Q201 Q401, 402, 601- 603	TR 2SC3000-AA TR 2SC945-T	151718 1400109			
Diodes	Diodes				
D501-506 D509 D601-603	D 11E1TAI-T LED DZ GZA11	1400508 1400509 1400510			
Coils					
L202 L204 L205 L206 L207 L301 L401 L501 L602 L605 L606	Coil $1.8\mu\text{H}$ Coil $16084\text{SU}$ Video IFT Coil $3600016$ Coil $3600017$ Coil $10\mu\text{H}$ Coil $12\mu\text{H}$ Coil $4.7\text{mH}$ Coil $270\mu\text{H}$ Coil $353001$ Coil $5.6\mu\text{H}$ Coil $47\mu\text{H}$	1400626 1400663 1400517 1400518 1400523 1400519 1400520 1400521 1400522 1409212 1400524			

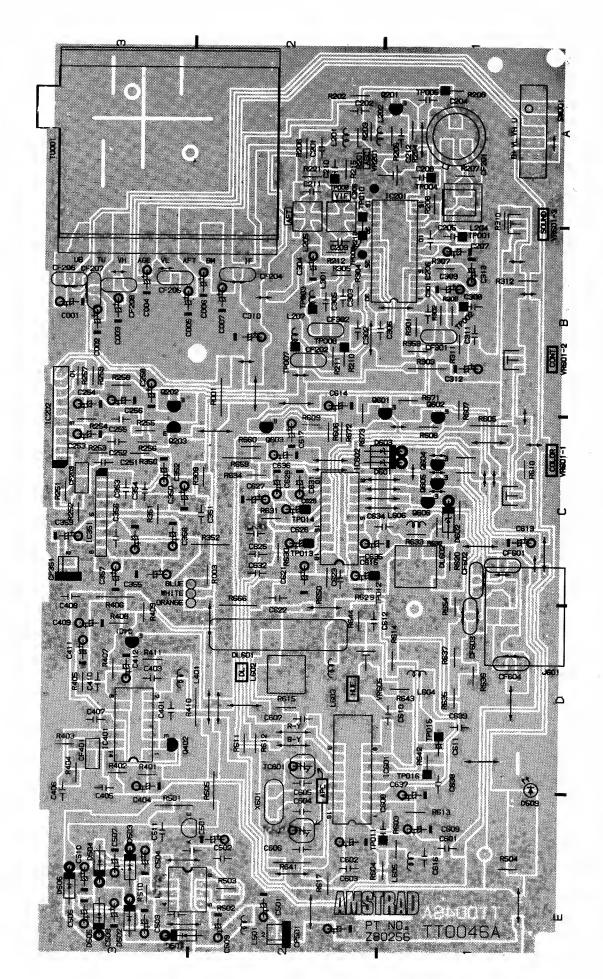
Ref. No.	Description	Part No.
Crystals		
X601 X401	Crystal NR-18 4.433619MHz Ceramic Oscillator CSB500F9	1400541 1400540
Sockets		
J601	Jack, DIN	1400525
Variable Resisto	rs	
VR201 VR501 VR601 VR605	VR SF 4.7k $\Omega$ VR Rot 100k $\Omega$ Tuning VR Rot 10k+10k+10k Con+Col+Snd VR SF 2.2k $\Omega$ Hue Con	1400526 1400527 1400528
Miscellaneous		
DL601 DL602 SP351 TU001	Delay Line Glass EFDEN645A31F Delay ELT-10Z334 Speaker Tuner U	1400535 1400536 1400537 1400539

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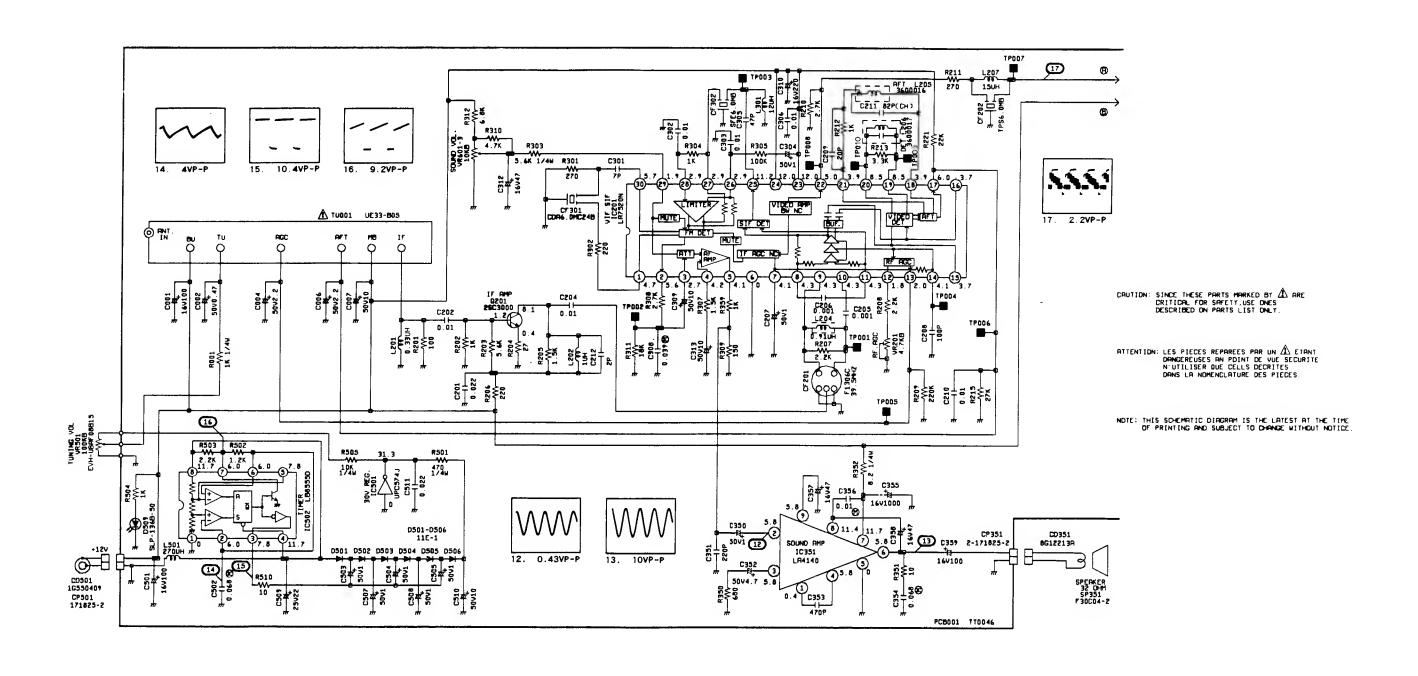
## MP3 CABINET EXPLODED VIEW



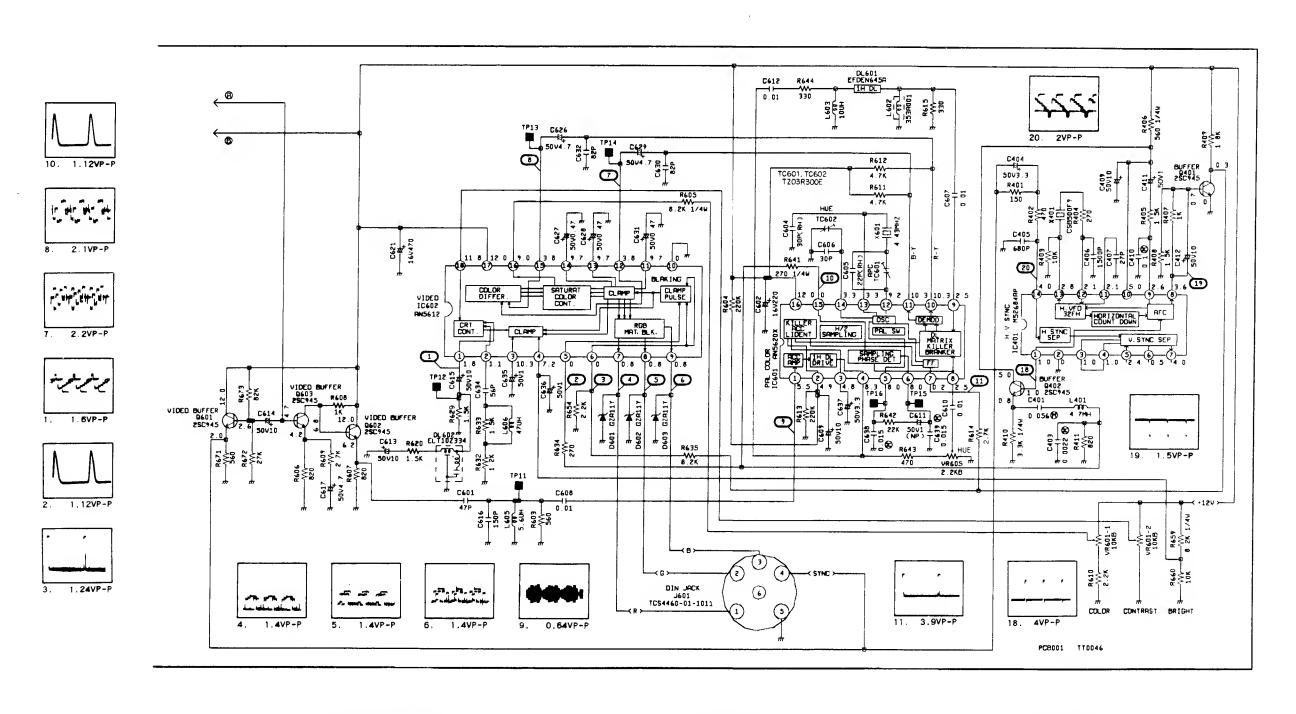
# MP3 TUNER P.C.B.



# MP3 TUNER SECTION CHASSIS SCHEMATIC DIAGRAM



#### MP3 VIDEO OUT CHASSIS SCHEMATIC DIAGRAM



CAUTION: SINCE THESE PARTS MARKED BY A ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED ON PARTS LIST ONLY. ATTENTION: LES PIECES REPAREES PAR UN 🗘 ETANT
DANGEREUSES AN POINT DE VUE SECURITE
N'UTILISER DUE DELLS DECRITES
DANS LA NOMENCLATURE DES PIECES.

NOTE: THIS SCHEMATIC DIRGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

# CT1 SECTION

# **CT-1 ELECTRICAL PARTS LIST**

Ref. No.	Description	Part No.			
IC's	1 2	1			
IC2	IC TMS 3450	1 100100			
IC1	IC TDA 1083	160420 160421			
Transistors	10 10/11000				
00 1					
Q4	TR 9014C	160414 160415			
Q1, 2	TR 1417F	160416			
Diodes					
D1, 3	D CDG-00	160417			
D2	D AFC Diode FV1043	160418			
D4	D 6.8V	160436			
D5-13, 15	D IN4148	190715			
D14	DI 10V	160419			
D16-21	D Rectifier IN4001	192016			
Coils					
L1, 2	FM Ant Coil 1033	160422			
L4	FM Osc Coil 1032	160423			
L3	FM Trap Coil 1008	160424			
T6	AM Osc Coil Red 6001	160425			
	Chock Coil 2T	160431			
L5	AM Ant. Coil	160432			
L6 L8	LW Ant. Coil	160433			
A	FM IF Chock Coil 2005	160434			
7 T1	Trimmer 16pF FM 1st IFT Orange F548-702985	160405			
T2	FM 2nd IFT Green CEC-F14	160428 160429			
T4	FM Det IFT Pink F784-702987	160429			
CT	AM/FM PVC 5376	160430			
Ref. No.	Description	Part No.			
Switches	Decomption	Fait NO.			
SW3	Slide Switch SKRAEGA MO	1 100100			
SW1,2	Slide Switch SK24F01-M9 Slide Switch SK43D01-M9	160402			
Fuses	Slide Switch SK4SDUT-MB	160403			
ruses	Fire TO45 v.A				
Minnelle	Fuse T315mA	160409			
Miscellaneous					
	Ferriter Bar	160404			
	Speaker 8Ω	160406			
	AC Transformer	160435			
	Display Red	160407			

DIAL DRUM SYSTEM THREADING PROCEDURES.
(P.C.B. WIRING-BOTTOM VIEW)

#### CT1 SCHEMATIC CIRCUIT DIAGRAM

